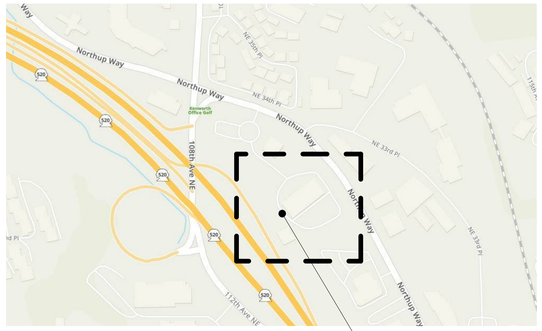
NORTHUP PREWASH RETROFIT NPDES - NWR

AREA MAP

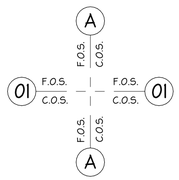


PROJECT LOCATION

SYMBOLS

GRID LINE DESIGNATION

C.O.S. = center of structure
F.O.S. = face of structure
(E) = existing



INTERIOR ELEVATION
ELEVATION NUMBER
SHEET NUMBER

EXTERIOR ELEVATION
ELEVATION NUMBER
SHEET NUMBER

BUILDING SECTION
SECTION NUMBER
SHEET NUMBER

WALL SECTION
SECTION LETTER
SHEET NUMBER

DETAIL
DETAIL NUMBER
SHEET NUMBER

REVISION
REVISION

ZONING INFORMATION

GOVERNING CODE	CITY OF -------- MUNICIPAL CODE TITLE ## - ZONING
PARCEL NUMBER	XXX
ZONING CHAPTER ##	X - XXXX
LAND USE CHAPTER ##	
PERMIT USES	B - BUSINESS X - XXXX

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO APPLICABLE BUILDING CODES AND ORDINANCES. WHERE MORE THAN ONE CODE OR ORDINANCE CONFLICT WITH EACH OTHER, THE MORE RESTRICTIVE CODE SHALL GOVERN.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT THE SITE AND SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF ANY UNCERTAINTIES OR DISCREPANCIES WITH DRAWINGS.
3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES AT THE SITE, PROTECT THEM FROM DAMAGE AND REPORT ANY DISCREPANCIES WITH DRAWINGS.
4. THE CONTRACTOR SHALL ENSURE THE HEALTH AND SAFETY OF THE PUBLIC AND ALL WHO ENTER THE WORK DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE WORK OF SUBCONTRACTORS AND ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION.
6. DRAWINGS SHALL NOT BE SCALED. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY CONFLICTS.
7. ALL CONSTRUCTION SHALL MEET OR EXCEED LOCAL INDUSTRY STANDARDS. DETAILS ARE PROVIDED TO INDICATE MINIMUM QUALITY AND TO GIVE STANDARDS OF CONSTRUCTION. IF A CONDITION IS NOT SPECIFICALLY DETAILED, SUBMIT A SUGGESTED DETAIL FOR GUIDANCE AND APPROVAL.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF MECHANICAL AND ELECTRICAL WORK AS REQUIRED TO ACCOMMODATE CONSTRUCTION AND SHALL PROVIDE ALL NECESSARY SHAFTS, OPENINGS, BASES AND STRUCTURAL SUPPORT FOR DUCTS, PIPES, CONDUITS AND EQUIPMENT.
9. DIMENSIONS ON PLANS ARE TO FACE OF STUD, CENTER OF COLUMN, CENTER OF MULLION, FACE OF CONCRETE, FACE OF MASONRY, FACE OF FRAME OR FACE OF ROUGH OPENING, UNLESS OTHERWISE NOTED.
10. THE CONCTRACTOR SHALL COORDINATE ALL LABORATORY TESTING AND INSPECTION REQUIRED FOR ALL EARTHWORK COMPACTION, SITE WELDING, HIGH STRENGTH BOLTING AND ALL STRUCTURAL CONCRETE. OWNER SHALL HIRE AN INDEPENDENT TESTING LAB FOR ALL CODE REQUIRED TESTING.
11. DEMOLISH ALL EXISTING COMPONENTS NECESSARY TO CONSTRUCT WORK. CAP ALL EXISTING UTILITIES (PLUMBING, ELECTRICAL AND MECHANICAL) BEHIND WALLS FLOORS, ETC.

PROJECT INFORMATION

SITE AREA SQUARE FOOTAGE	172,500 SQ FT
BUILDING AREA (NEW CONSTRUCTION) FIRST FLOOR	1,533 SQ FT
PARKING PROVIDED	SEE SHEET G002.

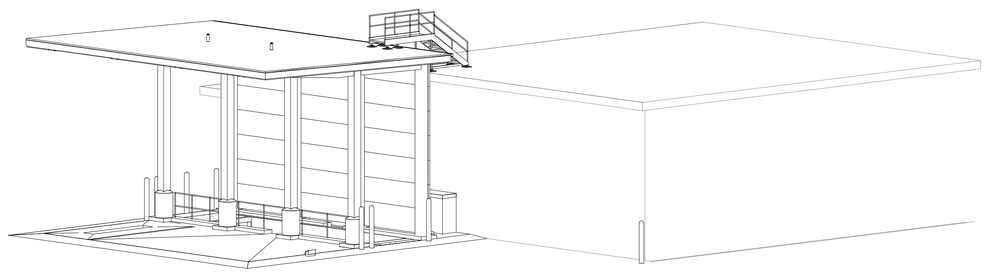
PROJECT DESCRIPTION

THE PROJECT CONSTRUCTS OF A NEW, COVERED VEHICLE WASH FACILITY LOCATED AT THE EXISTING WSDOT NORTHUP MAINTENANCE FACILITY. THE PROJECT IS LOCATED DIRECTLY ADJACENT TO THE EXISTING VEHICLE MAINTENANCE SHOP ON THE SW SIDE OF THAT STRUCTURE. THE FACILITY CONSISTS OF A CONCRETE WASH PAD COVERED BY AN ALL- STEEL CANOPY AS SHOWN IN THE DOCUMENTS. THE PURPOSE OF THE FACILITY IS TO PROVIDE HOSE END AND UNDER CHASSIS, PRE-WASH RINSING OF WSDOT VEHICLES.

CODE INFORMATION

GOVERNING CODE	2018 INTERNATIONAL BUILDING CODE (IBC) WASHINGTON STATE AMENDMENTS 2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC) WASHINGTON STATE AMENDMENTS 2018 WASHINGTON STATE ENERGY CODE (WSEC) 2018 UNIFORM PLUMBING CODE (UPC)
OCCUPANCY CLASSIFICATION IBC CHAPTER 3	B VEHICLE WASH
CONSTRUCTION TYPE IBC TABLE 503	VB (NON-FIRE RATED) (COMBUSTIBLE CONSTRUCTION)
MAXIMUM ALLOWABLE BUILDING HEIGHT IBC TABLE 503	40 FEET
MAXIMUM ALLOWABLE BUILDING STORIES IBC TABLE 503 (MAIN OCCUPANCY B/S-2 PER 508.2.3)	2 STORIES
MAXIMUM ALLOWABLE FLOOR AREA IBC TABLE 503 FIRST FLOOR	9,000 SQ FT
EXTERIOR WALL FIRE RESISTANCE RATING IBC (TABLE 602)	1-HOUR UL DESIGN BXUV.U050 (SEE A401)
FIRE SEPARATION DISTANCE IBC (TABLE 705.2)	BUILDING SEPARATION PROVIDED (7'-0"), ROOF OVERHANG PROTECTION SEPARATION PROVIDED 46".
UNPROTECTED OPENINGS IBC (TABLE 705.8)	UNPROTECTED OPENINGS IN AREA ADJACENT TO NEW STRUCTURE LIMITED TO 6% OF WALL AREA.
PARAPETS IBC 705.11	PARAPETS NOT REQUIRED PER EXEMPTION #3 - BUILDING IS ENTIRELY OF NON-COMBUSTIBLE CONSTRUCTION WITH CLASS B ROOFING.
AUTOMATIC FIRE SPRINKLER SYSTEM IBC CHAPTER 9	NOT PROVIDED
FIRE ALARM AND DETECTION SYSTEM IBC CHAPTER 9	NOT PROVIDED

SHEET INDEX



PLOTTED: 3/17/2022 10:20:00 AM PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR
FILE PATH: C:\Users\elia\Desktop\Revit 2021 Projects\a20-099-Northup Maint Facility Pre-Wash Station r21_eliolampay23719.rvt

PROJECT ARCHITECT: LC						REGION NO.	STATE:	
DRAWN BY: EA						FEDERAL AND PROJECT NO.		
REVIEWED BY: LC	2/9/22							
PERMIT SUBMITTAL	8/2/21					JOB NO:	a20-099	
BID SET	2/9/22					FCR NO:		
AS-BUILT BY:						DESIGN NO:		
	DATE					CONTRACT NO:		

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

HELIX DESIGN GROUP, INC

Helix design group

6021 12th street east
suite 201
tacoma, wa. 98424
tel: 253.922.9037
fax: 253.922.6499

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

COVER SHEET

G001

PROJECT INFORMATION

SITE AREA

SQUARE FOOTAGE	255,503 SQ FT (5.86 ACRES)

BUILDING AREA

EXISTING OFFICE BUILDING	4,193 SQ FT
EXISTING MAINTENANCE/SHOPS BUILDING	15,680 SQ FT
EXISTING EQUIPMENT BUILDING	3,999 SQ FT
NEW CANOPY	**1,533 SQ FT**
EXISTING BUILDING TOTAL:	23,872 SQ FT
WITH NEW WASH BUILDING:	**25,405 SQ FT**
1,533 SQ FT NEW / 23,872 SQ FT EXISTING =	6% CHANGE

LOT COVERAGE

LOT COVERAGE BY STRUCTURE:	25,405 / 191,627 = 13.25% (35% ALLOWED)
MAXIMUM HARD SURFACE COVERAGE: (HARD SURFACE INCLUDES ASPHALT, CONCRETE, BUILDINGS)	172,466 / 191,627 = 90.0% (85% ALLOWED)
NOTE: THIS PROJECT DOES NOT INCREASE THE HARD SURFACE AREA. EQUIPMENT BUILDING IS BEING CONSTRUCTED WHERE EXISTING ASPHALT PAVING IS INSTALLED.	
IMPERVIOUS SURFACE COVERAGE: (IMPERVIOUS SURFACE INCLUDES ASPHALT, CONCRETE, BUILDINGS)	172,466 / 191,627 = 90% (60% ALLOWED)
NOTE: THIS PROJECT DOES NOT INCREASE THE IMPERVIOUS SURFACE AREA. EQUIPMENT BUILDING IS BEING CONSTRUCTED WHERE EXISTING ASPHALT PAVING IS INSTALLED.	

PARKING PROVIDED

PERSONAL VEHICLE PARKING FOR BUILDING OCCUPANTS PROVIDED AT EXISTING ADMINISTRATION BUILDING LOCATED OUTSIDE FENCED IN MAINTENANCE YARD.

EXISTING OFFICE BUILDING (4,193 SQ FT)	
OFFICE BUSINESS/GENERAL OFFICE 4:1000 RATIO	17 STALLS REQUIRED
EXISTING MAINTENANCE/SHOPS BUILDING (15,680 SQ FT)	
1,810 SQ FT - OFFICE BUSINESS/GENERAL OFFICE 4:1000 RATIO	8 STALLS REQUIRED
10,870 SQ FT - MANUFACTURING/ASSEMBLY 1.5:1000 RATIO	17 STALLS REQUIRED
3,000 SQ FT - WAREHOUSE 1.5:1000 RATIO	5 STALLS REQUIRED
EXISTING STALLS REQUIRED:	47 STALLS REQUIRED
EXISTING STALLS PROVIDED:	60 STALLS PROVIDED 53 STANDARD 2 ADA CAR 1 ADA VAN

ZONING

OLB (OFFICE / LIMITED BUILDING)

SETBACK:SIDE YARD 30'-0"

LUC 20.20.010: 10' REQUIRED

AVERAGE FINISHED GRADE

61.91'

HEIGHT OF BUILDING

88.89'
SEE SHEET A300

OFF-SITE STREAMS

THERE WILL BE NO DISTURBANCE OF OFF-SITE STREAMS.

AVERAGE FINISH GRADE CALCULATION

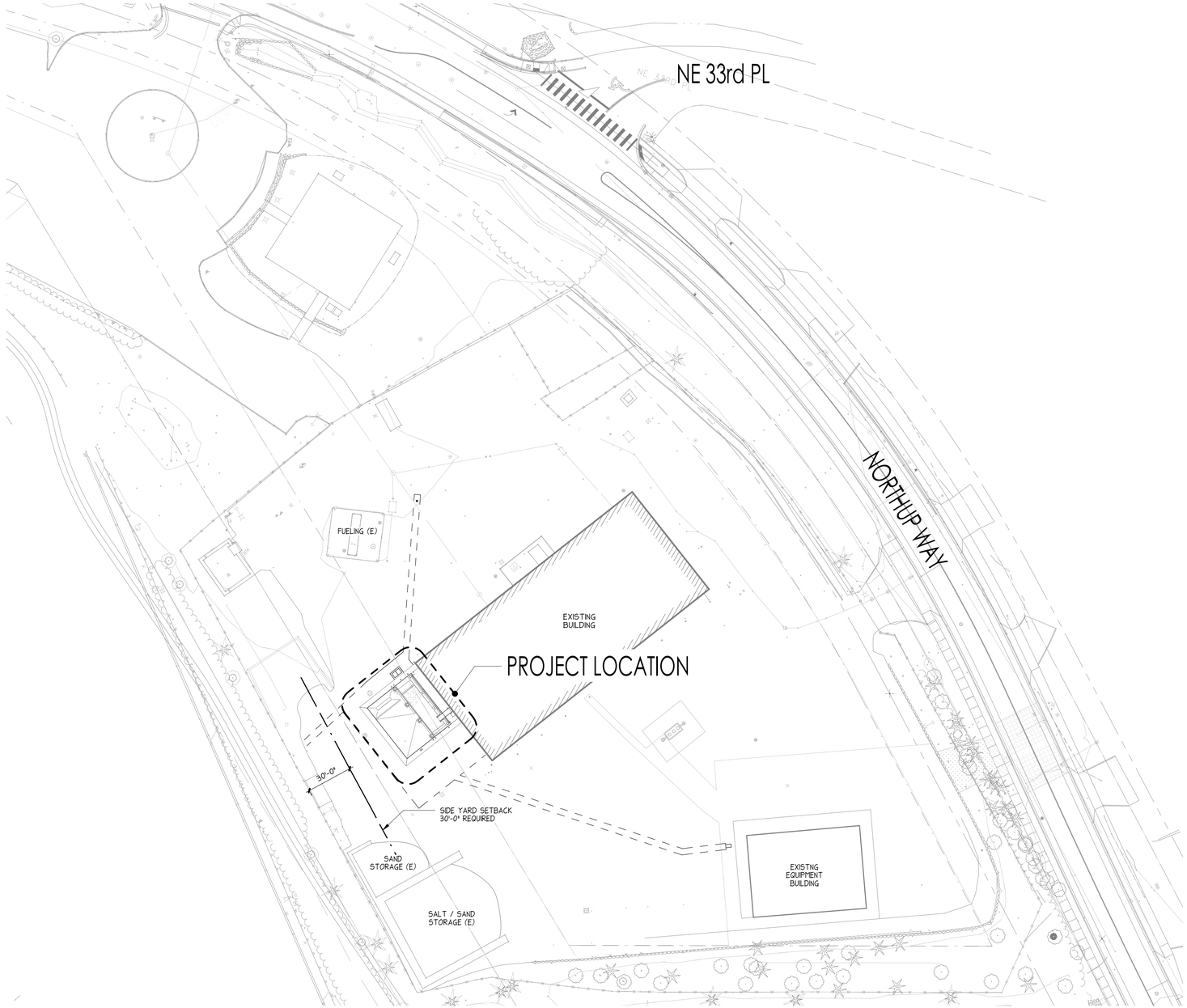
NORTH SIDE FINISH GRADE	GRADE
	60.33 FT
	60.70 FT
	61.24 FT
	61.59 FT
AVERAGE GRADE	60.97 FT

EAST SIDE FINISH GRADE	GRADE
	62.13 FT
	61.89 FT
	61.73 FT
	61.59 FT
AVERAGE GRADE	61.84 FT

SOUTH SIDE FINISH GRADE	GRADE
	62.00 FT
	61.83 FT
	61.66 FT
	61.31 FT
AVERAGE GRADE	61.70 FT

NORTH SIDE FINISH GRADE	GRADE
	61.31 FT
	60.98 FT
	60.56 FT
	60.33 FT
AVERAGE GRADE	60.80 FT

AVERAGE	GRADE
NORTH	60.97 FT
SOUTH	61.70 FT
EAST	61.84 FT
WEST	60.80 FT
AVERAGE FINISH GRADE	**61.32 FT**



1 SITE PLAN

10' 0' 20' 40' 80'

NORTH

PLOTTED: 3/4/2022 12:40:43 PM
FILE PATH: C:\Users\ella\Desktop\Revit 2021 Projects\a20-099-Northup Maint. Facility Pre-Wash Station -21_ellalampy23791.rvt

PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR

PROJECT ARCHITECT: LC						REGION NO.	STATE:	
DRAWN BY: EA						FEDERAL AND PROJECT NO.		
REVIEWED BY: LC	2/9/22							
PERMIT SUBMITTAL	8/2/21					JOB NO:	a20-099	
BID SET	2/9/22					FCR NO:		
AS-BUILT BY:						DESIGN NO:		
	DATE					CONTRACT NO:		

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

HELIX DESIGN GROUP, INC

Helix design group

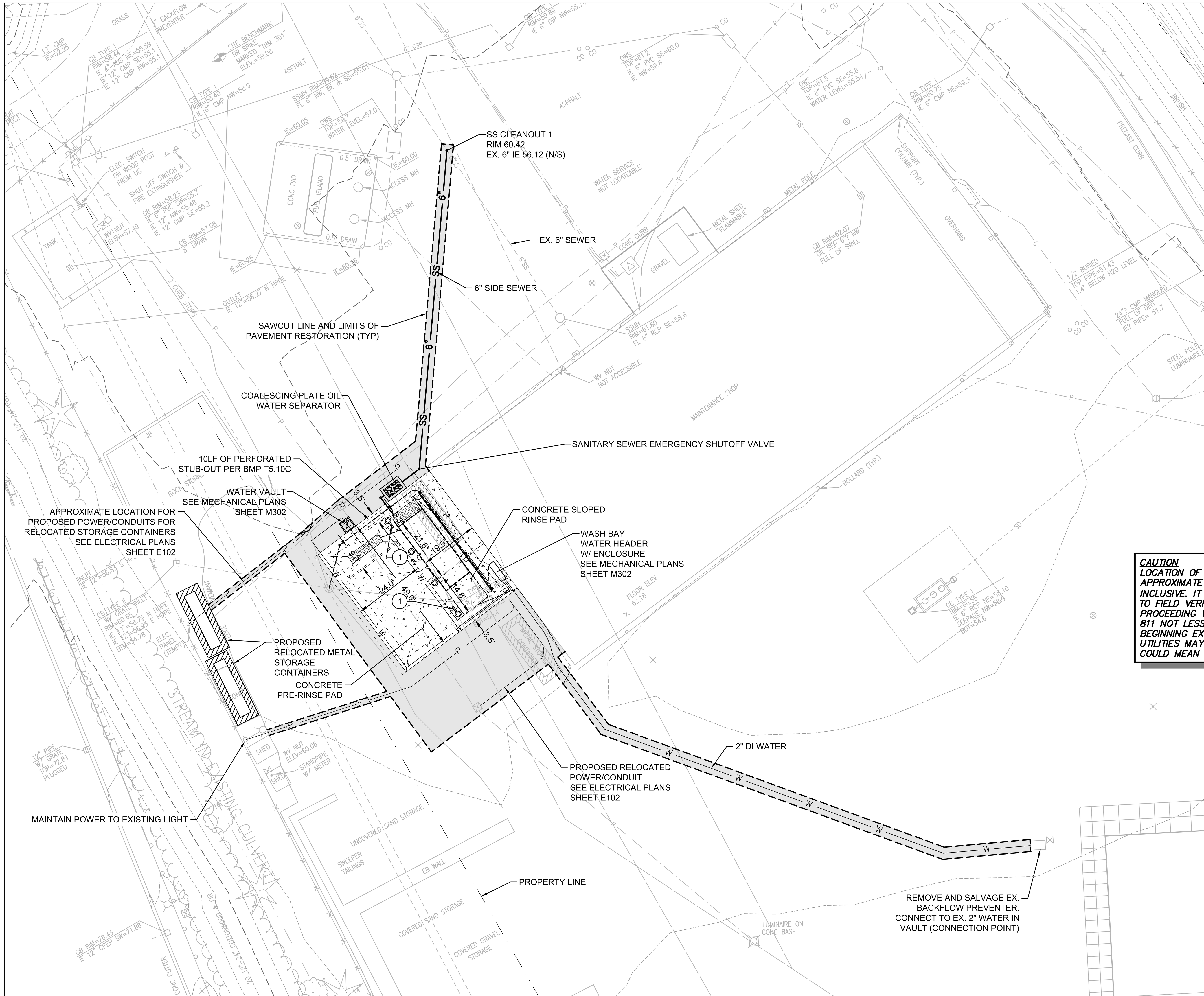
6021 12th street east
suite 201
tacoma, wa. 98424
tel: 253.922.9037
fax: 253.922.6499

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

ARCHITECTURAL SITE PLAN

G002



CAUTION

LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 811 NOT LESS THAN 2 FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

N

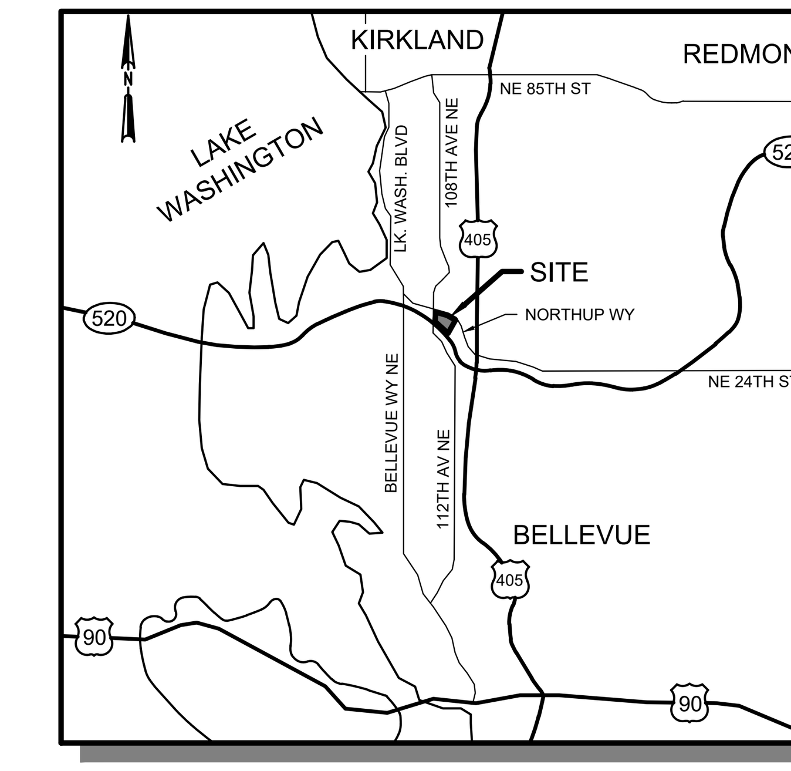
SCALE

20 0 10 20 40

(FEET)
1 INCH = 20 FT.

KEYNOTES

(1) 1.5" HOSE WITH A NOZZLE ATTACHMENT WITH REEL.



VICINTIY MAP
NOT TO SCALE

SITE INFORMATION

ADDRESS:	10833 NORTHUP WAY BELLEVUE, WA 98004
SEC/TWN/RGE:	SW 1/4, NE 1/4, SEC. 20, T25 N., R 5 E., W.M.
ZONING:	OLB
PARCEL#:	2025059100

PROJECT INFORMATION

OWNER/APPLICANT:	WASHINGTON STATE DEPT. OF TRANSPORTATION 10833 NORTHUP WAY BELLEVUE, WA 98004
CIVIL ENGINEER: SURVEYOR:	DAVID EVANS & ASSOCIATES, INC. 2106 PACIFIC AVENUE, SUITE 400 TACOMA, WA 98402 PHONE: (253) 250-0634 CONTACT: ROBERT T. JEFFERSON, PE
GEOTECHNICAL ENGINEER:	WASHINGTON STATE DEPT. OF TRANSPORTATION CONTACT: DONALD G. CHADBOURNE, PE
STRUCTURAL:	HELIX DESIGN GROUP 6021 12TH ST E SUITE 201 TACOMA, WA 98424 (253) 922.9037

SITE AREAS

CONCRETE:	2,278 SF
REPLACED ASPHALT	3,722 SF
TOTAL AREA OF DISTURBANCE	6,000 SF

UTILITY PURVEYORS / SERVICES

FIRE:	CITY OF BELLEVUE FIRE
WATER:	CITY OF BELLEVUE UTILITIES
SANITARY SEWER:	CITY OF BELLEVUE UTILITIES
POWER:	PUGET SOUND ENERGY
GAS:	PUGET SOUND ENERGY

CIVIL SHEET INDEX

LEGEND

PROPOSED FEATURES

SEWER SERVICE LINE	PROPOSED CLEANOUT (SD/SS)
STORM DRAIN SERVICE LINE	
WATER SERVICE LINE	PROPOSED WATER BEND
SAWCUT LINE	
EASEMENT LINE	PROPOSED ASPHALT PAVEMENT
60 10' PROPOSED CONTOURS	
62 2' PROPOSED CONTOURS	PROPOSED CONCRETE

GENERAL NOTES

UTILITY NOTE:
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THEIR REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT HAPPEN DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. DAVID EVANS AND ASSOCIATES ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES.

TRENCH NOTE:
TRENCH SAFETY IS THE CONTRACTOR'S RESPONSIBILITY. DAVID EVANS AND ASSOCIATES ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW

DATUM NOTE:
HORIZONTAL DATUM: NAD 83/91
BASED UPON CITY OF BELLEVUE HORIZONTAL CONTROL POINTS 1057 & 682.

VERTICAL DATUM: NAVD 88
BASED UPON CITY OF BELLEVUE # 65
COB BRASS CAP IN TOP OF CONCRETE WALL AT NE CORNER OF 108TH AVE NE AND NORTHUP WAY

TOPOGRAPHIC NOTE:
THE TOPOGRAPHICAL DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED BY OTHERS. DAVID EVANS AND ASSOCIATES CANNOT ENSURE THE ACCURACY OF THAT INFORMATION AND IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.

SURVEYOR'S NOTE:
PROPERTY LINES SHOWN ON THIS DRAWING ARE BASED UPON FOUND MONUMENTS IN NORTHUP WAY AND THE ALIGNMENT SURVEY PREPARED BY THE CITY OF BELLEVUE FOR THE LOCATION OF NORTHUP WAY (WORK ORDER NO. 96040). THE PROPERTY LINES ARE INFORMATIONAL ONLY AND DO NOT REPRESENT THE RESULTS OF A BOUNDARY SURVEY BY THIS SURVEYOR.

FILL SPECIFICATION:
FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL OR LOCAL LAW, ORDNANCE, CODE, REGULATION, RULE, ORDER OR STANDARD.

811 Know what's below. Call before you dig.

PROJECT ARCHITECT:				
DRAWN BY: KMP				
REVIEWED BY: TW				
REVIEWED BY: RJ				
PERMIT SET FIRST SUBMITTAL	8/2/21			
BID SET	2/9/22			
AS BUILT BY: MM/DD/UB				
	DATE	REVISION	BY	DATE

REGION NO. 10 | STATE: WASH
FEDERAL AID PROJECT NO.
UB PERMIT
HEDG00000025
FCR NO:
DESIGN NO:
CONTRACT NO:

BID SET

DAVID EVANS AND ASSOCIATES INC.
2106 Pacific Avenue, Suite 400
Tacoma, Washington 98402
Phone: 253.922.9780

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES-NWR

UB PLANS

CITY OF BELLEVUE, WA

SITE PLAN B

C100

SHEET OF SHEETS

TOPOGRAPHIC NOTE:

THE TOPOGRAPHICAL DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED BY OTHERS. ADDITIONAL SURVEY INFORMATION WAS CONDUCTED BY AMERICAN SURVEYING & ENVIRONMENTAL MARCH 2019. DAVID EVANS AND ASSOCIATES CANNOT ENSURE THE ACCURACY OF THAT INFORMATION AND IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.

N

SCALE

40 0 20 40 80

(FEET)
1 INCH = 40 FT.

LEGEND

SET REBAR & CAP
PK NAIL
HUB & TACK
MONITOR WELL
METAL SIGN POST
WOOD SIGN POST
TELR TELEPHONE RISER
CATCH BASIN
STORM INLET/ OUTFALL
WATER VALVE
FIRE HYDRANT
ICV IRRIGATION CONTROL VALVE
TRAFFIC SIGNAL W/ LUMINAIRE
PEDESTRIAN SIGNAL
JUNCTION BOX
POWER VAULT
POWER TRANSFORMER
TRAFFIC CABINET
LUMINAIRE (SQ. CONC. POLE, UNLESS NOTED)
TELEPHONE MANHOLE
GAS VALVE
CP CONCRETE PAD
EAC EXTRUDED ASPHALT CURB
BAC BARRIER CURB
VC VERTICAL CURB
GTP GATE POST
RD ROOF DRAIN
AC AIR CONDITIONING
PS PARKING SPACES
OWS OIL/WATER SEPARATOR
EB ECOLOGY BLOCK
JB JERSEY BARRIER
EVERGREEN TREE
DECIDUOUS TREE
ROCKERY
G GAS LINE
P UNDERGROUND POWER
FO T/TV FIBER OPTIC DUCT BANK TELEPHONE/CABLE TV
T UNDERGROUND TELEPHONE
W WATER LINE
SD STORM DRAIN
SS SEWER LINE
CHANNELIZATION LINE
FENCE
GUARD RAIL
RIGHT-OF-WAY
CENTERLINE RIGHT-OF-WAY
QUARTER SECTION LINE

811 Know what's below. Call before you dig.

PROJECT ARCHITECT:				
DRAWN BY: KMP				
REVIEWED BY: TW				
REVIEWED BY: RJ				
PERMIT SET FIRST SUBMITTAL	8/2/21			
BID SET	2/9/22			
AS BUILT BY: MM/DD/UB				
	DATE	REVISION	BY	DATE

REGION NO. 10 | STATE: WASH
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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES-NWR

UB PLANS

CITY OF BELLEVUE, WA

EXISTING CONDITIONS

C101

SHEET OF SHEETS

Plot Date: 2/9/2022 4:14 PM
Save Date: 7/27/2021 12:54 PM
A&EConsultTTL.dwg 08/1/98
By: Tyson Wentz
By: Tvw
File: P:\H\HEDG00000025\0400CAD\EC\SHEETS\STORM WATER SEWER-UB PERMIT\EC-EC-UB-HEDG0025.dwg

WATER GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2021 CITY OF BELLEVUE WATER ENGINEERING STANDARDS AND THE DEVELOPER EXTENSION AGREEMENT.
2. ALL PIPE SHALL BE DUCTILE IRON CLASS 52 UNLESS OTHERWISE SHOWN.
3. ALL PIPE AND FITTINGS NOT TO BE DISINFECTED IN PLACE PER AWWA C651 SHALL BE SWABBED WITH 1% AVAILABLE CHLORINE SOLUTION PRIOR TO INSTALLATION.
4. THE NEW WATER MAIN SHALL BE CONNECTED TO THE EXISTING SYSTEM ONLY AFTER NEW MAIN IS PRESSURE TESTED, FLUSHED, DISINFECTED AND SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED AND RECEIVED BY THE CITY'S INSPECTOR. SEE STANDARD DETAIL W-9.
5. AFTER DISINFECTING THE WATER MAIN, DISPOSE OF CHLORINATED WATER BY DISCHARGING TO THE NEAREST OPERATING SANITARY SEWER.
6. WATER MAIN SHUT-DOWNS SHALL BE COORDINATED WITH THE WATER OPERATIONS DIVISION FOR PREFERRED TIMING DURING FLOW CONTROL CONDITIONS. WATER MAIN SHUTDOWNS SHALL NOT BE SCHEDULED TO TAKE PLACE ON FRIDAYS, OR ON THE FIVE DAYS BEFORE NOR ONE DAY AFTER A CITY HOLIDAY, UNLESS OTHERWISE APPROVED BY THE UTILITY.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
8. DEFLECT THE WATER MAIN ABOVE OR BELOW EXISTING UTILITIES AS REQUIRED TO MAINTAIN 3 FT. MINIMUM COVER AND 12-INCH MINIMUM VERTICAL CLEARANCE BETWEEN UTILITIES UNLESS OTHERWISE SPECIFIED.
9. WRAP ALL DUCTILE IRON PIPE AND ADJACENT VALVES AND FITTINGS WITH 8-MIL. POLYETHYLENE CONFORMING TO AWWA C105.
10. THE WATER MAIN SHALL BE INSTALLED ONLY AFTER THE ROADWAY SUBGRADE IS BACKFILLED, GRADED AND COMPACTED IN CUT AND FILL AREAS.
11. TRENCH BACKFILL AND SURFACE RESTORATION OF EXISTING ASPHALT PAVEMENT SHALL BE AS REQUIRED BY THE RIGHT-OF-WAY USE PERMIT.
12. ALL FITTINGS SHALL BE BLOCKED PER STANDARD DETAILS UNLESS OTHERWISE SPECIFIED.
13. ALL SERVICES SHALL BE 1" X 1" PER STANDARD DETAILS UNLESS OTHERWISE SPECIFIED. ADAPTORS FOR 3/4" METERS SHALL BE USED WHERE APPLICABLE.
14. WHEN WORKING WITH ASBESTOS CEMENT PIPE, THE CONTRACTOR IS REQUIRED TO MAINTAIN WORKERS' EXPOSURE TO ASBESTOS MATERIAL AT OR BELOW THE LIMIT PRESCRIBED IN WAC 296-62-07705.
15. CALL 1-800-424-5555, OR 811, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATIONS.
16. UNIFORM PLUMBING CODE REQUIRES THE INSTALLATION OF PRIVATELY OWNED AND OPERATED PRESSURE REDUCING VALVES WHERE THE OPERATING PRESSURE EXCEEDS 80 PSI.
17. THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER. FLUSHING OF STREETS SHALL NOT BE PERMITTED WITHOUT PRIOR CITY APPROVAL.
18. BEFORE COMMENCEMENT OF TRENCHING, THE CONTRACTOR SHALL PROVIDE CATCH BASIN INSERTS FOR ALL CATCH BASINS THAT WILL RECEIVE RUNOFF FROM THE PROJECT SITE. THE CONTRACTOR SHALL PERIODICALLY INSPECT THE CONDITION OF ALL INSERTS AND REPLACE AS NECESSARY.
19. ABANDONMENT OF EXISTING WATER SERVICES SHALL BE ACCOMPLISHED AS FOLLOWS:
   (SEE W5-29 ABANDONING FACILITIES FOR OTHER FACILITY ABANDONMENT)
   A. REMOVE EXISTING SERVICE SADDLE FROM WATER MAIN AND REPLACE WITH NEW STAINLESS STEEL REPAIR BAND, ROMAC SS2, FORD SERVICE SADDLE FC101, CC
   THREADED SADDLE AND A CC THREAD BRASS PLUG, OR APPROVED EQUAL (WILL NOT BE REQUIRED WHEN WATER MAIN IS TO BE ABANDONED).
   B. REMOVE AND DISPOSE OF EXISTING SETTER AND METER BOX.
   C. CAP OR CRIMP (IF COPPER) EXISTING SERVICE LINE TO BE ABANDONED IN PLACE, EACH END.
   D. RETURN EXISTING METER TO THE UTILITY INSPECTOR.
20. WHERE NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE AC PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-8. WRAP DI PIPE AND COUPLINGS WITH 8-MIL POLYETHYLENE CONFORMING TO AWWA C105. ALTERNATIVELY, WHERE DIRECTED BY THE ENGINEER, THE TRENCH SHALL BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF, AKA FLOWABLE FILL) FROM BOTTOM OF TRENCH TO THE INVERT OF THE AC MAIN.
21. AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 TO 90 DEGREES.
22. WHERE WATER MAIN CROSSES ABOVE OR BELOW SANITARY SEWER, ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED FOR MAXIMUM JOINT SEPARATION.
23. AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN THE CONCRETE BLOCKING AND OTHER BURIED UTILITIES OR STRUCTURES SHALL BE 5 FEET.
24. WORKERS MUST FOLLOW CONFINED SPACE REGULATIONS AND PROCEDURES WHEN ENTERING OR DOING WORK IN COB OWNED CONFINED SPACES. COMPLETED PERMIT MUST BE GIVEN TO THE UTILITIES INSPECTOR PRIOR TO ENTRY.
25. MANHOLES, CATCH BASINS AND VAULTS ARE CONSIDERED TO BE PERMIT-REQUIRED CONFINED SPACES. ENTRY INTO THESE SPACES SHALL BE IN ACCORDANCE WITH CHAPTER 296-809 WAC.
26. WHEN WORK IS TO OCCUR IN EASEMENTS, THE CONTRACTOR SHALL NOTIFY THE EASEMENT GRANTOR AND BELLEVUE UTILITIES IN WRITING A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING WORK (NOT INCLUDING WEEKENDS OR HOLIDAYS). FAILURE TO NOTIFY GRANTOR AND BELLEVUE UTILITIES WILL RESULT IN A STOP WORK ORDER BEING POSTED UNTIL THE MATTER IS RESOLVED TO THE SATISFACTION OF BELLEVUE UTILITIES. A WRITTEN RELEASE FROM THE EASEMENT GRANTOR SHALL BE FURNISHED TO THE UTILITIES INSPECTOR PRIOR TO PERMIT SIGN OFF.
27. THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY AND EXISTING PUBLIC UTILITY EASEMENT(S) AFTER CONSTRUCTION TO A CONDITION EQUAL OR BETTER THAN CONDITION PRIOR TO CONTRACTOR SHALL FURNISH A SIGNED RELEASE FROM ALL AFFECTED PROPERTY OWNERS AFTER RESTORATION HAS BEEN COMPLETED.

SANITARY SEWER GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2021 CITY OF BELLEVUE UTILITY ENGINEERING STANDARDS AND THE DEVELOPER EXTENSION AGREEMENT.
2. ALL NEW MANHOLES SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48" AND SHALL CONFORM TO THE STANDARD DETAILS.
3. SANITARY SEWER PIPE SHALL BE PVC CONFORMING TO ASTM D-3034 SDR 35 (4"-15") OR ASTM F-679 (18"-27"). BEDDING AND BACKFILL SHALL BE AS SHOWN IN THE STANDARD DETAILS.
4. WHERE SHOWN AS C900 PVC, THE SEWER PIPE SHALL HAVE DIMENSION RATIO (DR 18) AND CONFORM TO AWWA C900 OR AWWA C905.
5. ALL SIDE SEWERS SHALL BE 6" DIAMETER PIPE AT A MINIMUM 2% SLOPE, UNLESS OTHERWISE NOTED ON THE STANDARD DETAILS.
6. SIDE SEWER STATIONS ARE REFERENCED FROM NEAREST DOWNSTREAM MANHOLE.
7. LOT CORNERS MUST BE SET AND SIDE SEWER LOCATIONS VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
8. ALL SIDE SEWER STUBS SHALL BE CAPPED WITH A WATERTIGHT CAP AND GASKET. CAP LOCATION SHALL BE MARKED WITH A 2 X 4 STAKE, 12 FEET LONG, WITH ONE END BURIED AT DEPTH OF THE CAP INVERT AND EXTENDING AT LEAST 3 FEET VERTICALLY OUT OF THE GROUND. THE PORTION OF STAKE ABOVE GROUND SHALL BE PAINTED WHITE AND MARKED WITH THE WORD "SEWER" AND THE DEPTH FROM PIPE INVERT TO GROUND SURFACE. CONNECT PIPE TO STAKE WITH AN 8-GAUGE WIRE AT OR ABOVE FINISHED GROUND LEVEL.
9. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREIN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. IMMEDIATELY NOTIFY THE ENGINEER IF A CONFLICT EXISTS.
10. ALL TESTING AND CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT.
11. ALL TRENCHES SHALL BE COMPACTED, AND HMA IN PLACE IN PAVED AREAS, PRIOR TO TESTING SEWER LINES FOR ACCEPTANCE.
12. SIDE SEWER STUBS SHALL BE TESTED FOR ACCEPTANCE AT THE SAME TIME THE MAIN SEWER IS TESTED.
13. TOPS OF MANHOLES WITHIN PUBLIC RIGHTS-OF-WAY SHALL NOT BE ADJUSTED TO FINAL GRADE UNTIL JUST PRIOR TO PAVING.
14. ALL MANHOLES IN UNPAVED AREAS SHALL INCLUDE A CONCRETE SEAL AROUND ADJUSTING RINGS PER STANDARD DETAIL.
15. CONTRACTOR SHALL ADJUST ALL MANHOLE RIMS TO FLUSH WITH FINAL FINISHED GRADES, UNLESS OTHERWISE SHOWN.
16. ALL SEWER MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE "STAKED" BY A SURVEYOR LICENSED IN WASHINGTON STATE FOR "LINE AND GRADE" AND CUT SHEETS PROVIDED TO THE ENGINEER, PRIOR TO STARTING CONSTRUCTION.
17. CONTRACTOR SHALL INSTALL, AT ALL CONNECTIONS TO EXISTING DOWNSTREAM MANHOLES, SCREENS OR PLUGS TO PREVENT FOREIGN MATERIALS FROM ENTERING EXISTING SANITARY SEWER SYSTEM. SCREENS OR PLUGS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION AND SHALL BE REMOVED ALONG WITH COLLECTED DEBRIS AT THE TIME OF FINAL INSPECTION AND IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT.
18. SURFACE RESTORATION OF EXISTING ASPHALT PAVEMENT SHALL BE AS REQUIRED BY THE RIGHT-OF-WAY USE PERMIT.
19. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION BETWEEN ALL WATER AND SEWER LINES. ANY CONFLICTS SHALL BE REPORTED TO THE UTILITY AND THE ENGINEER PRIOR TO CONSTRUCTION.
20. THE CONTRACTOR SHALL ENSURE AND VERIFY THAT NO CONFLICTS EXIST BETWEEN SANITARY SEWER LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.
21. MINIMUM COVER OVER SEWER PIPE SHALL BE FIVE FEET, UNLESS OTHERWISE SHOWN.
22. THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER.
23. NOT USED.
24. SIDE SEWER DEMOLITION SHALL BE PERFORMED PRIOR TO REMOVAL OF BUILDING FOUNDATION. THE SIDE SEWER FOR EACH BUILDING SHALL BE ABANDONED FROM THE BUILDING CONNECTION TO THE EDGE OF THE PUBLIC RIGHT-OF-WAY, OR PROPERTY LINE. THE CONTRACTOR SHALL CAP THE END OF THE SIDE SEWER STUB TO REMAIN IN PLACE. SIDE SEWER DEMOLITION SHALL BE PERFORMED IN THE PRESENCE OF THE CITY OF BELLEVUE SEWER MAINTENANCE ENGINEERING TECHNICIAN.
25. AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 TO 90 DEGREES.
26. AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN THE CONCRETE BLOCKING AND OTHER BURIED UTILITIES OR STRUCTURES SHALL BE 5 FEET.
27. WHERE NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE AC PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-8. ALTERNATIVELY, WHERE DIRECTED BY THE ENGINEER, THE TRENCH MAY BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF, AKA FLOWABLE FILL) FROM BOTTOM OF TRENCH TO BOTTOM OF THE AC MAIN.
28. CALL 1-800-424-5555, OR 811, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATES.
29. MANHOLES, CATCH BASINS AND VAULTS ARE CONSIDERED TO BE PERMIT-REQUIRED CONFINED SPACES. ENTRY INTO THESE SPACES SHALL BE IN ACCORDANCE WITH CHAPTER 296-809 WAC.
30. THE CONTRACTOR SHALL PROVIDE COLOR CCTV EQUIPMENT SHALL INCLUDE TELEVISION CAMERAS, A TELEVISION MONITOR, CABLES, POWER SOURCES, SIDE-LAUNCH CAPABLE IF NECESSARY, AND OTHER EQUIPMENT. FOCAL DISTANCE SHALL BE ADJUSTABLE THROUGH A RANGE FROM 6 INCHES TO INFINITY. THE CCTV EQUIPMENT SHALL INCLUDE A DISTANCE MEASURING INSTRUMENT (DMI) TO MEASURE THE HORIZONTAL DISTANCE TRAVELED BY THE CAMERA. THE DMI READOUT SHALL APPEAR CONTINUOUSLY ON THE VIDEO PRODUCED BY THE INSPECTION AND SHALL BE ACCURATE TO LESS THAN 1 PERCENT ERROR OVER THE LENGTH OF THE SECTION OF PIPELINE BEING INSPECTED. FOR STORM OR SANITARY SEWERS, THE LENGTH IS MEASURED FROM THE CENTERLINE OF THE MANHOLE OR CATCH BASIN TO THE CENTERLINE OF THE NEXT MANHOLE OR CATCH BASIN. SEE SECTION S5-13 CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION FOR VIDEO FORMATTING, NAMING, AND DELIVERY REQUIREMENTS. THE CCTV INSPECTION SYSTEM SHALL BE PERFORMED UTILIZING ONE OF THE FOLLOWING VIDEO CAMERA SYSTEMS: REMOTE-FOCUS STATIONARY LENS CAMERAS; ROTATING LENS CAMERAS; OR PAN-AND-TILT CAMERAS. THE CCTV CAMERA SHALL BE MOUNTED ON A SKID, FLOATABLE RAFT SYSTEM, OR TRANSPORTER BASED ON THE CONDITIONS OF THE PIPELINE TO BE TELEVISED. TELEPHONES, RADIOS, OR OTHER SUITABLE MEANS OF COMMUNICATION SHALL BE UTILIZED TO ENSURE COMMUNICATION EXISTS BETWEEN MEMBERS OF THE CREW. THE CONTRACTOR SHALL INSPECT THE PIPELINE DURING OPTIMUM LOW-FLOW LEVEL CONDITIONS, AS PRE-APPROVED BY THE UTILITY INSPECTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY INSPECTOR PRIOR TO VIDEO INSPECTION. THE TELEVISION CAMERA UTILIZED SHALL BE SPECIFICALLY DESIGNED AND CONSTRUCTED FOR SEWER INSPECTION. THE CAMERA SHALL BE OPERATIVE IN 100 PERCENT HUMIDITY CONDITIONS. LIGHTING FOR THE CAMERA SHALL MINIMIZE REFLECTIVE GLARE. LIGHTING AND PICTURE QUALITY SHALL BE SUITABLE TO PROVIDE A CLEAR, IN-FOCUS PICTURE OF THE ENTIRE PERIPHERY OF THE PIPELINE FOR ALL CONDITIONS ENCOUNTERED DURING THE WORK. IF THE QUALITY OF THE VIDEO IS DEEMED TO BE UNACCEPTABLE BY THE UTILITY INSPECTOR, THE PIPELINE SHALL BE RE-TELEVISED AT NO COST TO THE CITY. THE CAMERA SHALL BE MOVED THROUGH THE PIPELINE AT A UNIFORM RATE, STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPELINE CONDITION, BUT IN NO CASE SHALL THE TELEVISION CAMERA BE PULLED AT A SPEED GREATER THAN 30 FEET PER MINUTE STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPE CONDITION. THE VIDEO SHALL BE TAKEN AFTER INSTALLATION, CLEANING, AND PRESSURE TEST TO INSURE THAT NO DEFECTS EXIST. THE PROJECT WILL NOT BE ACCEPTED UNTIL ALL DEFECTS HAVE BEEN REPAIRED.
31. WHEN WORK IS TO OCCUR IN EASEMENTS, THE CONTRACTOR SHALL NOTIFY THE EASEMENT GRANTOR AND BELLEVUE UTILITIES IN WRITING A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING WORK (NOT INCLUDING WEEKENDS OR HOLIDAYS). FAILURE TO NOTIFY GRANTOR AND BELLEVUE UTILITIES WILL RESULT IN A STOP WORK ORDER BEING POSTED UNTIL THE MATTER IS RESOLVED TO THE SATISFACTION OF BELLEVUE UTILITIES. A WRITTEN RELEASE FROM THE EASEMENT GRANTOR SHALL BE FURNISHED TO THE UTILITY INSPECTOR PRIOR TO PERMIT SIGN-OFF.
32. THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY AND EXISTING PUBLIC SEWER EASEMENT(S) AFTER CONSTRUCTION TO A CONDITION EQUAL OR BETTER THAN CONDITION PRIOR TO ENTRY. THE CONTRACTOR SHALL FURNISH A SIGNED RELEASE FROM ALL AFFECTED PROPERTY OWNERS AFTER RESTORATION HAS BEEN COMPLETED.

STORM DRAINAGE NOTES:

1) STORM PIPE SHALL BE PVC CONFORMING TO ASTM D-3034 SDR 35 (4" – 15") OR ASTM F679 (18"-27"). BEDDING AND BACKFILL SHALL BE AS SHOWN IN THE STANDARD DETAILS.
2) THE FOOTING DRAINAGE SYSTEM AND THE ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED AND SHALL SEPARATELY CONVEY COLLECTED FLOWS TO THE CONVEYANCE SYSTEM OR TO ON-SITE STORMWATER FACILITIES.
3) PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF STORM DRAINAGE WORK, PIPES AND STORM DRAIN STRUCTURES SHALL BE CLEANED AND FLUSHED. ANY OBSTRUCTIONS TO FLOW WITHIN THE STORM DRAIN SYSTEM, (SUCH AS RUBBLE, MORTAR AND WEDGED DEBRIS), SHALL BE REMOVED AT THE NEAREST STRUCTURE. WASH WATER OF ANY SORT SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM OR SURFACE WATERS.
4) ENDS OF EACH STORM DRAIN STUB AT THE PROPERTY LINE SHALL BE CAPPED AND LOCATED WITH AN 8' LONG 2" X 4" BOARD, EMBEDDED TO THE STUB CAP AND EXTENDING AT LEAST 3 FEET ABOVE GRADE, AND MARKED PERMANENTLY "STORM". A COPPER 12 GA. LOCATE WIRE FIRMLY ATTACHED. THE STUB DEPTH SHALL BE INDICATED ON THE MARKER.
5) ALL GRATES IN ROADWAYS SHALL BE DUCTILE IRON, BOLT-LOCKING, VANED GRATES PER THE STANDARD DETAILS. STRUCTURES IN TRAFFIC LANES OUTSIDE OF THE CURB LINE WHICH DO NOT COLLECT RUNOFF SHALL BE FITTED WITH ROUND, BOLT-LOCKING FRAMES AND SOLID COVERS. OFF-STREET STRUCTURES WHICH DO NOT COLLECT RUNOFF SHALL BE FITTED WITH BOLT-LOCKING SOLID COVERS.
6) VEGETATION/LANDSCAPING IN THE DETENTION POND, BIORETENTION FACILITY, VEGETATED ROOF AND/OR DRAINAGE SWALE(S) ARE AN INTEGRAL PART OF THE RUNOFF TREATMENT SYSTEM FOR THE PROJECT. SUCH DRAINAGE FACILITIES WILL NOT BE ACCEPTED UNTIL PLANTINGS ARE ESTABLISHED.
7) ALL NEW MANHOLES SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL CONFORM TO THE STANDARD DETAILS. ALL NEW CATCH BASINS SHALL CONFORM TO THE STANDARD DETAILS.
8) STORM STUB STATIONS ARE REFERENCED FROM NEAREST DOWNSTREAM MANHOLE/CATCH BASIN.
9) ALL TESTING AND CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE OF THE CITY'S INSPECTOR.
10) ALL PUBLIC STORM DRAINS SHALL BE AIR TESTED AND HAVE A VIDEO INSPECTION PERFORMED PRIOR TO ACCEPTANCE (SEE #17 BELOW). STORM MAIN CONSTRUCTED WITH FLEXIBLE PIPE SHALL BE DEFLECTION TESTED WITH A MANDREL PRIOR TO ACCEPTANCE.
11) STORM STUBS SHALL BE TESTED FOR ACCEPTANCE AT THE SAME TIME THE STORM MAIN IS TESTED.
12) ALL MANHOLES/ CATCH BASINS IN UNPAVED AREAS SHALL INCLUDE A CONCRETE SEAL AROUND ADJUSTMENT RINGS PER STANDARD DETAILS.
13) ALL STORM MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE "STAKED" BY A SURVEYOR LICENSED IN WASHINGTON STATE FOR "LINE AND GRADE" AND CUT SHEETS PROVIDED TO THE CITY'S INSPECTOR, PRIOR TO STARTING CONSTRUCTION.
14) STORM DRAINAGE MAINLINES, STUBS AND FITTINGS SHALL BE CONSTRUCTED USING THE SAME PIPE MATERIAL AND MANUFACTURER. CONNECTIONS BETWEEN STUBS AND THE MAINLINE WILL BE MADE WITH A TEE FITTING. TEE FITTING SHALL BE FROM SAME MANUFACTURER AS PIPE. CUT-IN CONNECTIONS ARE ONLY ALLOWED WHEN CONNECTING A NEW STUB TO AN EXISTING MAINLINE.
15) MANHOLES, CATCH BASINS AND VAULTS ARE CONSIDERED TO BE PERMIT-REQUIRED CONFINED SPACES. ENTRY INTO THESE SPACES SHALL BE IN ACCORDANCE WITH CHAPTER 296-809 WAC.
16) PLACEMENT OF SURFACE APPURTENANCES (MH LIDS, VALVE LIDS, ETC.) IN TIRE TRACKS OF TRAFFIC LANES SHALL BE AVOIDED WHENEVER POSSIBLE.
17) THE CONTRACTOR SHALL PERFORM A VIDEO INSPECTION AND PROVIDE A DIGITAL COPY OF THE VIDEO INSPECTION FOR THE CITY'S REVIEW. THE VIDEO SHALL PROVIDE A MINIMUM OF 480 X 640 RESOLUTION AND COVER THE ENTIRE LENGTH OF THE APPLICABLE PIPE. THE CAMERA SHALL BE MOVED THROUGH THE PIPE AT A UNIFORM RATE (≤ 30 FT/MIN), STOPPING WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPE CONDITION. THE VIDEO SHALL BE TAKEN AFTER INSTALLATION AND CLEANING TO INSURE THAT NO DEFECTS EXIST. THE PROJECT WILL NOT BE ACCEPTED UNTIL ALL DEFECTS HAVE BEEN REPAIRED.
18) NOT USED.
19) ALL CONCRETE STRUCTURES (VAULTS, CATCH BASINS, MANHOLES, OIL/WATER SEPARATORS, ETC.) SHALL BE VACUUM TESTED.
20) MANHOLES, CATCH BASINS AND INLETS IN EASEMENTS SHALL BE CONSTRUCTED TO PROVIDE A STABLE, LEVEL GRADE FOR A MINIMUM RADIUS OF 2.5 FEET AROUND THE CENTER OF THE ACCESS OPENING TO ACCOMMODATE CONFINED SPACE ENTRY EQUIPMENT.
21) TOPS OF MANHOLES/CATCH BASINS WITHIN PUBLIC RIGHT-OF-WAY SHALL NOT BE ADJUSTED TO FINAL GRADE UNTIL AFTER PAVING.
22) CONTRACTOR SHALL ADJUST ALL MANHOLE/CATCH BASIN RIMS TO BE FLUSH WITH FINAL FINISHED GRADES, UNLESS OTHERWISE SHOWN.
23) DURING CONSTRUCTION, CONTRACTOR SHALL INSTALL, AT ALL CONNECTIONS TO EXISTING DOWNSTREAM MANHOLES/CATCH BASINS, SCREENS OR PLUGS TO PREVENT FOREIGN MATERIALS FROM ENTERING EXISTING STORM DRAINAGE SYSTEM. SCREENS OR PLUGS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE CONSTRUCTION AND SHALL BE REMOVED ALONG WITH COLLECTED DEBRIS AT THE TIME OF FINAL INSPECTION AND IN THE PRESENCE OF THE CITY'S INSPECTOR.
24) NOT USED.
25) MINIMUM COVER OVER STORM DRAINAGE PIPE SHALL BE 2 FEET, UNLESS OTHERWISE SHOWN.
26) REDIRECT SHEET FLOW, BLOCK DRAIN INLETS AND/OR CURB OPENINGS IN PAVEMENT AND INSTALL FLOW DIVERSION MEASURES TO PREVENT CONSTRUCTION SILT LADEN RUNOFF AND DEBRIS FROM ENTERING EXCAVATIONS AND FINISH SURFACES FOR BIORETENTION FACILITIES AND PERMEABLE PAVEMENTS.
27) WHERE AMENDED SOILS, BIORETENTION FACILITIES, AND PERMEABLE PAVEMENTS ARE INSTALLED, THESE AREAS SHALL BE PROTECTED AT ALL TIMES FROM BEING OVER-COMPACTED.

UTILITY NOTES:

1) THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE EXCAVATOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN, AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HERE ON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. IMMEDIATELY NOTIFY THE RESPONSIBLE PROFESSIONAL ENGINEER IF A CONFLICT EXISTS.
2) CALL 1-800-424-5555, OR 8-1-1, 72 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATES.
3) THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF FIVE FEET (5') HORIZONTAL SEPARATION BETWEEN ALL WATER AND STORM DRAINAGE LINES. ANY CONFLICT SHALL BE REPORTED TO THE UTILITY AND THE RESPONSIBLE PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION.
4) AVOID CROSSING WATER OR SEWER MAINS AT HIGHLY ACUTE ANGLES. THE SMALLEST ANGLE MEASURE BETWEEN UTILITIES SHOULD BE 45 DEGREES.
5) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT NO CONFLICTS EXIST BETWEEN STORM DRAINAGE FACILITIES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.
6) AT POINTS WHERE EXISTING THRUST BLOCKING IS FOUND, MINIMUM CLEARANCE BETWEEN CONCRETE BLOCKING AND OTHER BURIED UTILITIES OR STRUCTURES SHALL BE 5 FEET.
7) WHERE A NEW UTILITY LINE CROSSES BELOW AN EXISTING AC MAIN, THE AC PIPE SHALL BE REPLACED WITH DI PIPE TO 3 FEET PAST EACH SIDE OF THE TRENCH AS SHOWN ON STANDARD DETAIL W-8. ALTERNATIVELY, APPROVED IN WRITING BY THE UTILITY, THE TRENCH MAY BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF, AKA FLOWABLE FILL) FROM BOTTOM OF TRENCH TO BOTTOM OF AC MAIN.

RESTORATION NOTES:

1) SURFACE RESTORATION OF EXISTING ASPHALT PAVEMENT SHALL BE AS REQUIRED BY THE RIGHT-OF-WAY USE PERMIT.
2) THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY AND EXISTING PUBLIC STORM DRAINAGE EASEMENT(S) AFTER CONSTRUCTION TO A CONDITION EQUAL OR BETTER THAN CONDITION PRIOR TO ENTRY. THE CONTRACTOR SHALL FURNISH A SIGNED RELEASE FROM ALL AFFECTED PROPERTY OWNERS AFTER RESTORATION HAS BEEN COMPLETED.

GENERAL NOTES:

1) ALL WORK SHALL CONFORM TO THE 2021 EDITION OF THE CITY OF BELLEVUE UTILITIES DEPARTMENT ENGINEERING STANDARDS.
2) THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS.
3) WHEN WORK IS TO OCCUR IN EASEMENTS, THE CONTRACTOR SHALL NOTIFY THE EASEMENT GRANTOR AND CITY'S INSPECTOR IN WRITING A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING WORK (NOT INCLUDING WEEKENDS OR HOLIDAYS). FAILURE TO NOTIFY GRANTOR AND THE CITY'S INSPECTOR WILL RESULT IN A STOP WORK ORDER BEING POSTED UNTIL THE MATTER IS RESOLVED TO THE SATISFACTION OF THE UTILITY. A WRITTEN RELEASE FROM THE EASEMENT GRANTOR SHALL BE FURNISHED TO THE CITY'S INSPECTOR PRIOR TO PERMIT SIGN-OFF.
4) ALL TRENCHES SHALL BE BACKFILLED. COMPACTED, AND PAVEMENT IN PLACE IN PAVED AREAS, PRIOR TO TESTING UTILITY PIPES FOR ACCEPTANCE.

RECORD DRAWINGS:

RECORD DRAWINGS SHALL BE BASED ON FIELD SURVEY INFORMATION AND FIELD MEASUREMENTS. ALL SURVEY WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A PROFESSIONAL LAND SURVEYOR
REGISTERED IN THE STATE OF WASHINGTON.

RECORD DRAWING INFORMATION SHALL BE RECORDED ON THE DETAIL, PLAN AND PROFILE VIEWS OF THE APPROVED CONSTRUCTION DRAWINGS. INCOMPLETE, INACCURATE, ILLEGIBLE, OR POOR-QUALITY DRAWINGS WILL BE REJECTED.

ALL PLAN SHEETS MUST HAVE A "RECORD DRAWING" STAMP BLOCK.

811 Know what's **below.** **Call** before you dig.

PROJECT ARCHITECT:					REGION NO. 10 / STATE: WASH
DRAWN BY: KMP					FEDERAL AID PROJECT NO.
REVIEWED BY: TW					**UB PERMIT**
REVIEWED BY: RJ					**HEDG00000025**
PERMIT SET FIRST SUBMITTAL	8/2/21				
BID SET	2/9/22				FCR NO:
AS BUILT BY: MM/DD/UB					DESIGN NO:
	DATE	REVISION	BY	DATE	CONTRACT NO:

BID SET

DAVID EVANS AND ASSOCIATES INC.
2106 Pacific Avenue, Suite 400
Tacoma, Washington 98402
Phone: 253.922.9780

Washington State
Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES-NWR

UB PLANS

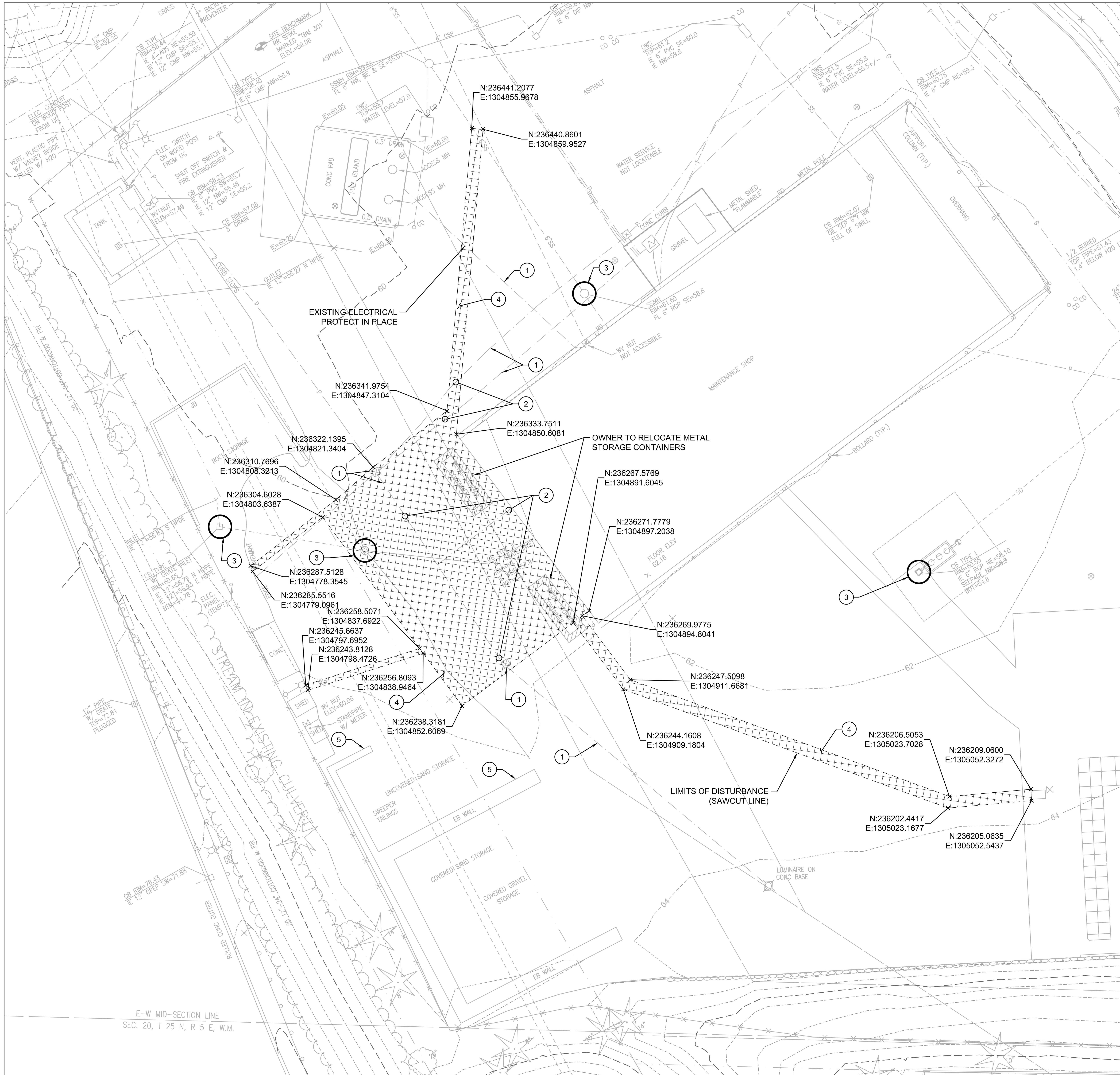
CITY OF BELLEVUE, WA

COB STANDARD NOTES

C102

SHEET OF SHEETS

Plot Date: 2/9/2022 4:15 PM By: Tyson Wentz
Save Date: 7/27/2021 12:57 PM By: Tvw File: P:\H\HEDG00000025\0400CAD\EC\SHEETS\STORM WATER SEWER-UB PERMIT\EC-GN-UB-HEDG0025.dwg
A&EConsultTL.dwg 08/1/98



LEGEND

GRADING AND TEMPORARY EROSION AND SEDIMENTATION CONTROL

- SAWCUT
- 10' EXISTING CONTOURS
- 2' EXISTING CONTOURS
- STORM DRAIN INLET PROTECTION
- REMOVE EXISTING ASPHALT

EARTHWORK NOTE:

APPROXIMATE EXCAVATION = 80 CY

QUANTITIES GIVEN ARE APPROXIMATE ONLY. EARTHWORK QUANTITIES ARE NOT TO BE USED FOR CONSTRUCTION BIDDING. CONTRACTOR SHALL DO AN EARTHWORK QUANTITY TAKEOFF.

APPLICABLE BMP'S:

THE FOLLOWING CITY OF BELLEVUE CLEARING AND GRADING BMPS ALSO APPLY TO THIS PROJECT. SEE CSWPPP SHORT FORM:

- BMP C150 - MATERIALS ON HAND
- BMP C151 - CONCRETE HANDLING
- BMP C152 - SAWCUTTING AND SURFACE POLLUTION PREVENTION
- BMP C162 - SCHEDULING
- BMP C220 - STORM DRAIN INLET PROTECTION

SHEET NOTES:

(1) PROTECT AND PRESERVE EXISTING UTILITY

(2) RELOCATE POWER AROUND PROPOSED WASH FACILITY, REFER TO ELECTRICAL PLANS

(3) INSTALL INLET PROTECTION IN EXISTING STORM STRUCTURE

(4) DEMOLISH AND REMOVE EXISTING ASPHALT PAVEMENT FULL DEPTH

(5) PROTECT AND PRESERVE EXISTING ECOLOGY BLOCK WALL

TESC NOTES:

1. THE BMP FACILITIES SHOWN ON THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. UPGRADES TO BMP'S SHOWN NECESSARY TO ACCOUNT FOR UNEXPECTED STORM EVENTS OR CHANGING SITE CONDITIONS WILL BE REVIEWED AND DETERMINED BY CESCL (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
2. ALL REFERENCES MADE TO STANDARD PLANS SHALL BE TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS, AND SHALL BE IN ACCORDANCE WITH THE 2020 EDITION AND THE CITY OF BELLEVUE STANDARD CLEARING AND GRADING DEVELOPMENT STANDARDS (2017).

THROUGHOUT CONSTRUCTION:

1. INSPECT AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF BELLEVUE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
2. RELOCATE EROSION CONTROL MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY OF BELLEVUE STANDARDS.
3. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
4. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

TOPOGRAPHIC NOTE:

THE TOPOGRAPHICAL DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED BY OTHERS. ADDITIONAL SURVEY INFORMATION WAS CONDUCTED BY AMERICAN SURVEYING & ENVIRONMENTAL MARCH 2019. DAVID EVANS AND ASSOCIATES CANNOT ENSURE THE ACCURACY OF THAT INFORMATION AND IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.

DEMOLITION NOTE:

THE REMOVAL AND DEMOLITION PLAN IS INTENDED TO COMMUNICATE THE GENERAL SCOPE OF DEMOLITION AND REMOVAL THAT MUST OCCUR FOR CONSTRUCTION OF SITE IMPROVEMENTS THAT ARE DEPICTED IN THIS PLAN SET. WHILE EVERY ATTEMPT HAS BEEN MADE TO SHOW A COMPLETE LIST OF ITEMS TO BE REMOVED AND DEMOLISHED THE CONTRACTOR SHALL ENSURE THAT THE SCOPE OF REMOVAL AND DEMOLITION IS SUFFICIENT TO CONSTRUCT THE PROPOSED SITE IMPROVEMENTS AS SHOWN.

811 Know what's below. Call before you dig.

PROJECT ARCHITECT:				
DRAWN BY: KMP				
REVIEWED BY: TW				
REVIEWED BY: RJ				
PERMIT SET FIRST SUBMITTAL	8/2/21			
BID SET	2/9/22			
AS BUILT BY: MM/DD/YY				
	DATE	REVISION	BY	DATE

REGION NO. 10 | STATE: WASH

FEDERAL AID PROJECT NO.

GD PERMIT
HEDG00000025

FCR NO:
DESIGN NO:
CONTRACT NO:

BID SET

DAVID EVANS AND ASSOCIATES INC.
2106 Pacific Avenue, Suite 400
Tacoma, Washington 98402
Phone: 253.922.9780

Washington State
Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES-NWR

CLEARING, GRADING, AND TESC PLANS

CITY OF BELLEVUE, WA

TESC PLAN

C103

SHEET OF SHEETS

By: Tyson Wentz File: P:\H\HEDG00000025\0400CAD\EC\SHEETS\CLEAR GRADE AND TESC-GD PERMIT\EC-TP-GD-HEDG0025.dwg
By: Gxle

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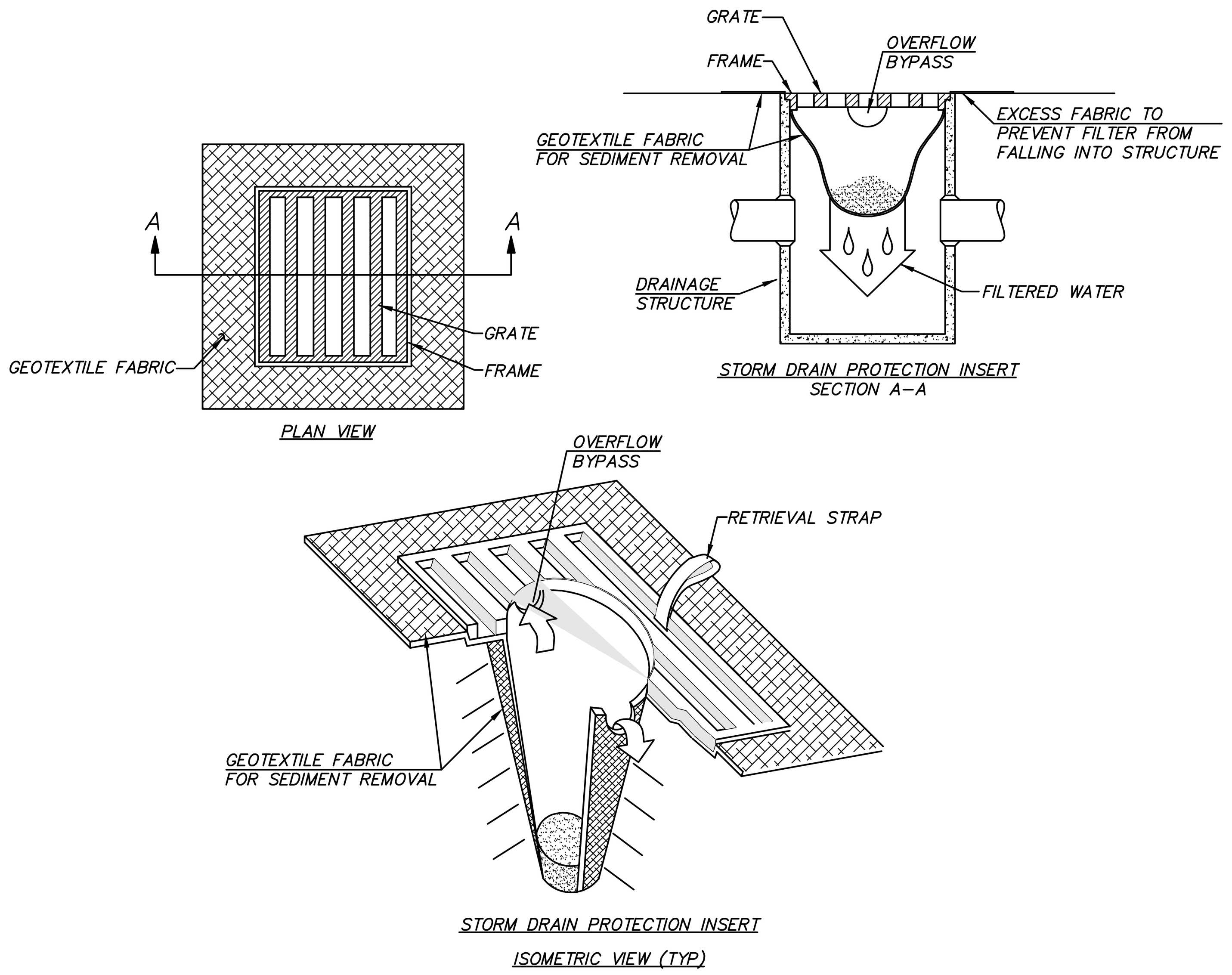

CATCH BASIN TEMPORARY EROSION CONTROL FILTER

NOT TO SCALE

CONSTRUCTION SEQUENCE

1. HOLD THE PRE-CONSTRUCTION MEETING.
2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR.
3. FENCE CONSTRUCTION LIMITS.
4. INSTALL CB PROTECTION.
5. DEMOLISH AND REMOVE ASPHALT PAVEMENT
6. EXCAVATE AREA.
7. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF BELLEVUE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
8. RELOCATE EROSION CONTROL MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY OF BELLEVUE CLEARING AND GRADING STANDARDS.
9. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
10. INSTALL STORM SYSTEM
11. INSTALL SIDE SEWER AND WATER LINE.
12. INSTALL CANOPY FOOTINGS AND WASH AREA.
13. INSTALL/RESTORE ASPHALT PAVEMENT.
14. UPON COMPLETION OF THE PROJECT, REMOVE BMPS IF APPROPRIATE.

STANDARD NOTES FOR EROSION CONTROL PLANS

1. ALL CLEARING & GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE (COB) CLEARING & GRADING CODE, CLEARING & GRADING DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEVELOPMENT SERVICES (DSD) PRIOR TO CONSTRUCTION.

   IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB.

2. APPROVAL OF THIS EROSION/SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

3. A COPY OF THE APPROVED PLANS AND DRAWINGS MUST BE ON-SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.

4. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.

5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.

7. ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.

8. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

9. CLEARING SHALL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN.

10. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

11. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT.

12. THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS RESULT OF CONSTRUCTION.

13. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

14. ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN THE CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING & GRADING PERMIT. LOCATIONS FOR THE MOBILIZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.

15. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT.

16. FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM 5% SLOPE, PER THE INTERNATIONAL RESIDENTIAL CODE (IRC) R401.3.

Know what's **below.** **Call** before you dig.

By: Tyson Wentz File: P:\H\HEDG00000025\0400CAD\EC\SHEETS\CLEAR GRADE AND TESC-GD PERMIT\EC-TN-GD-HEDG0025.dwg
By: Tvw

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PROJECT ARCHITECT:				
DRAWN BY: KMP				
REVIEWED BY: TW				
REVIEWED BY: RJ				
PERMIT SET FIRST SUBMITTAL	8/2/21			
BID SET	2/9/22			
AS BUILT BY: MM/DD/YY				
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REGION NO. 10 STATE: WASH
FEDERAL AID PROJECT NO.
GD PERMIT
HEDG00000025
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CONTRACT NO:

BID SET

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Washington State Department of Transportation
HQ CAPITAL FACILITIES

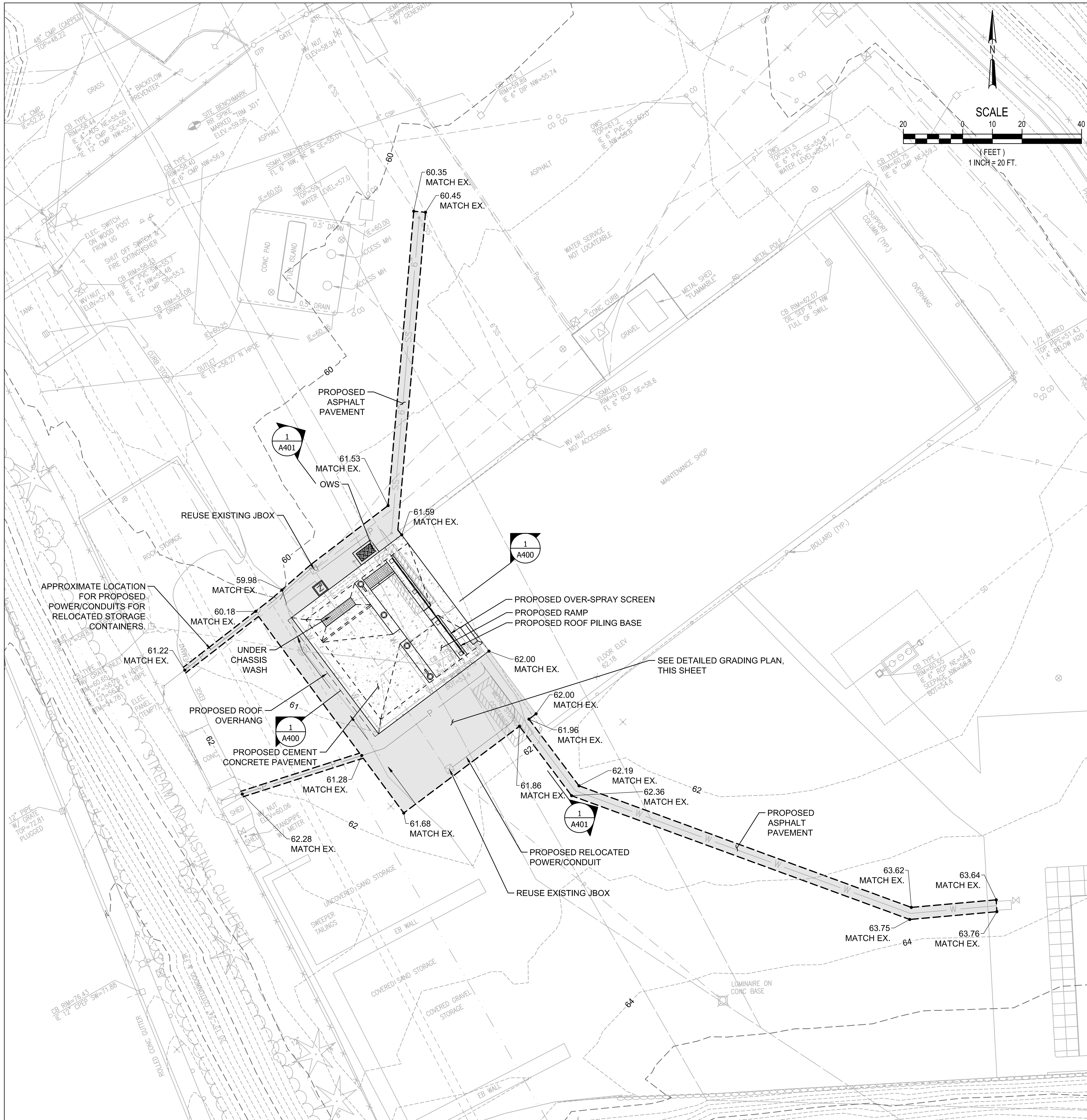
NORTHUP PREWASH RETROFIT NPDES-NWR

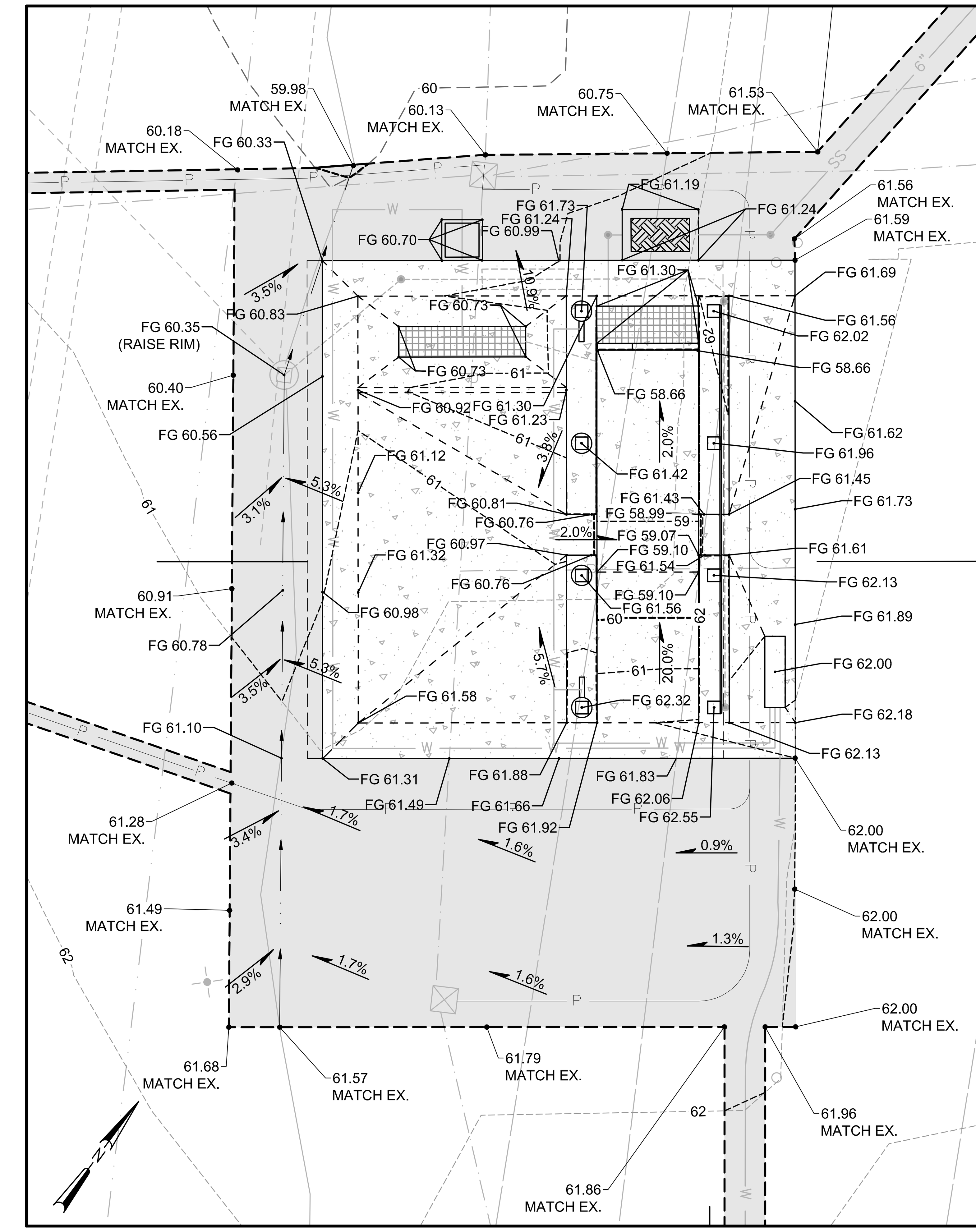
CLEARING, GRADING, AND TESC PLANS

CITY OF BELLEVUE, WA

TESC NOTES AND DETAILS

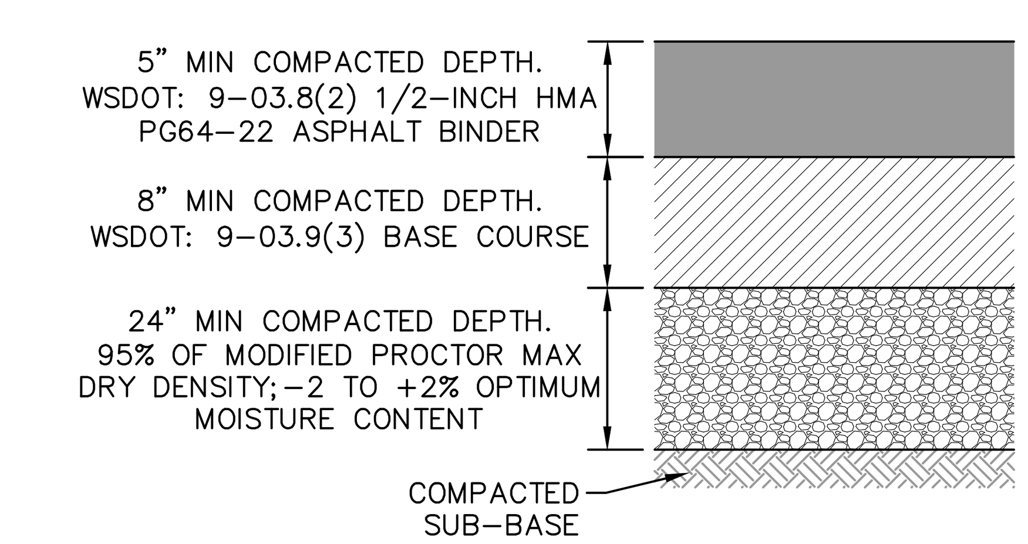
C104
SHEET
OF
SHEETS



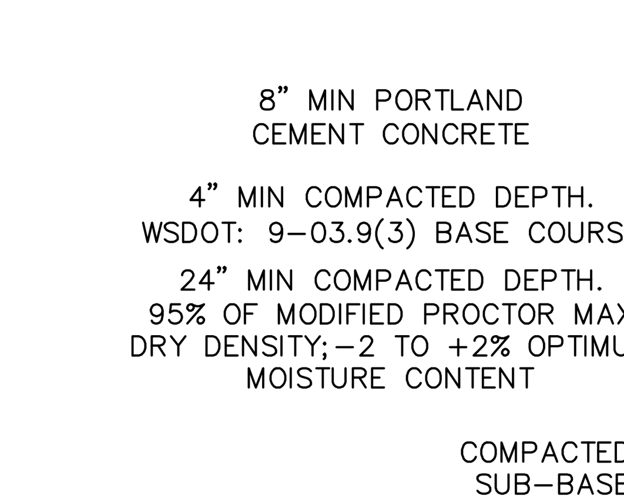


DETAILED GRADING PLAN

1" = 10'



AC PAVEMENT SECTION



PCC PAVEMENT SECTION

TOPOGRAPHIC NOTE:

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CAUTION
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811 Know what's **below.** **Call** before you dig.

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A&EConsultTTL.dwg 08/1/98

PROJECT ARCHITECT:				
DRAWN BY: KMP				
REVIEWED BY: TW				
REVIEWED BY: RJ				
PERMIT SET FIRST SUBMITTAL	8/2/21			
BID SET	2/9/22			
AS BUILT BY: MM/DD/YY				
	DATE	REVISION	BY	DATE

REGION NO. 10 | STATE: WASH
FEDERAL AID PROJECT NO.
GD PERMIT
HEDG00000025
FCR NO:
DESIGN NO:
CONTRACT NO:

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DAVID EVANS AND ASSOCIATES INC.
2106 Pacific Avenue, Suite 400
Tacoma, Washington 98402
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Washington State
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HQ CAPITAL FACILITIES

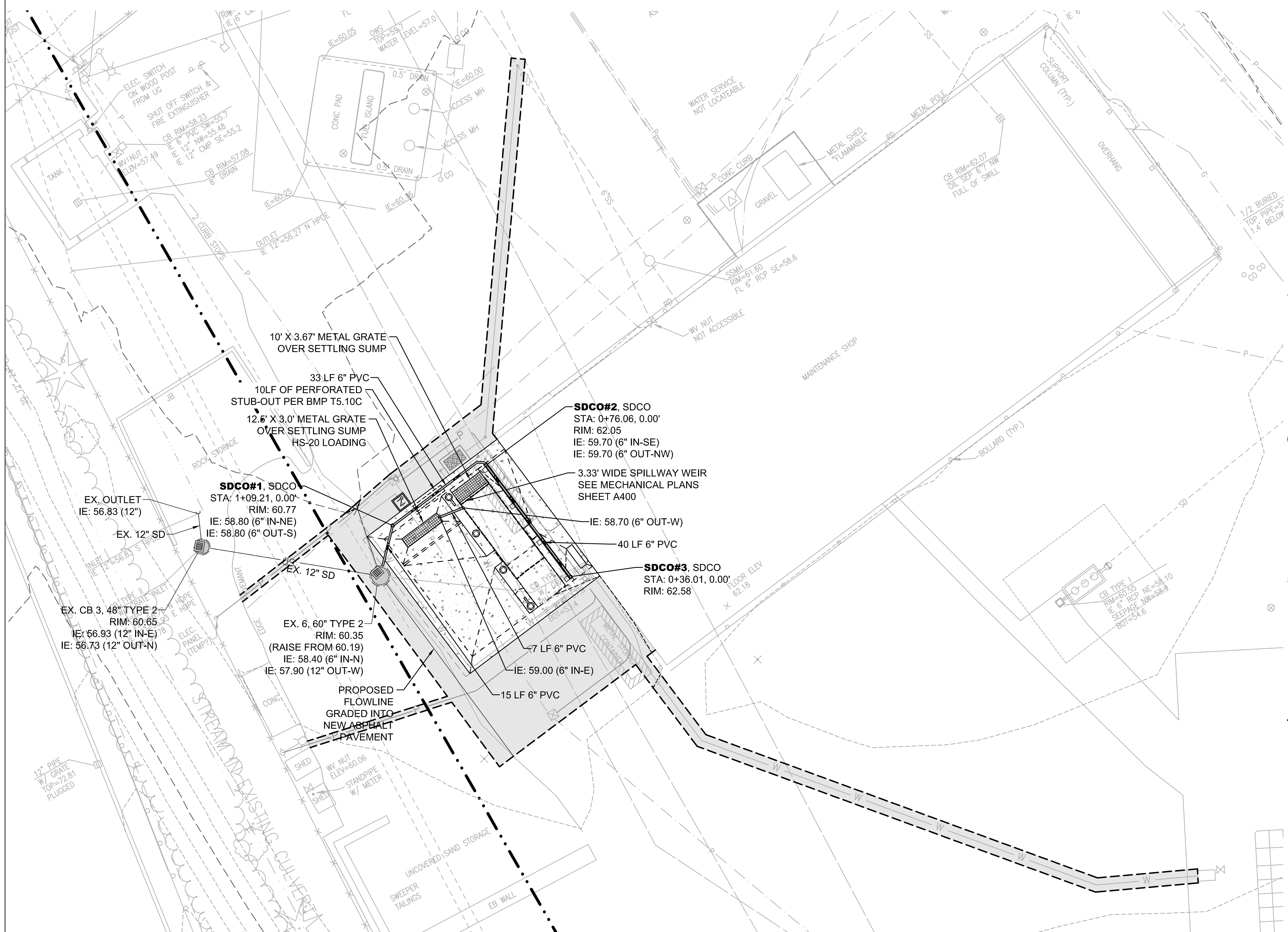
NORTHUP PREWASH RETROFIT NPDES-NWR
CLEARING, GRADING, AND TESC PLANS
CITY OF BELLEVUE, WA
GRADING AND PAVEMENT PLAN

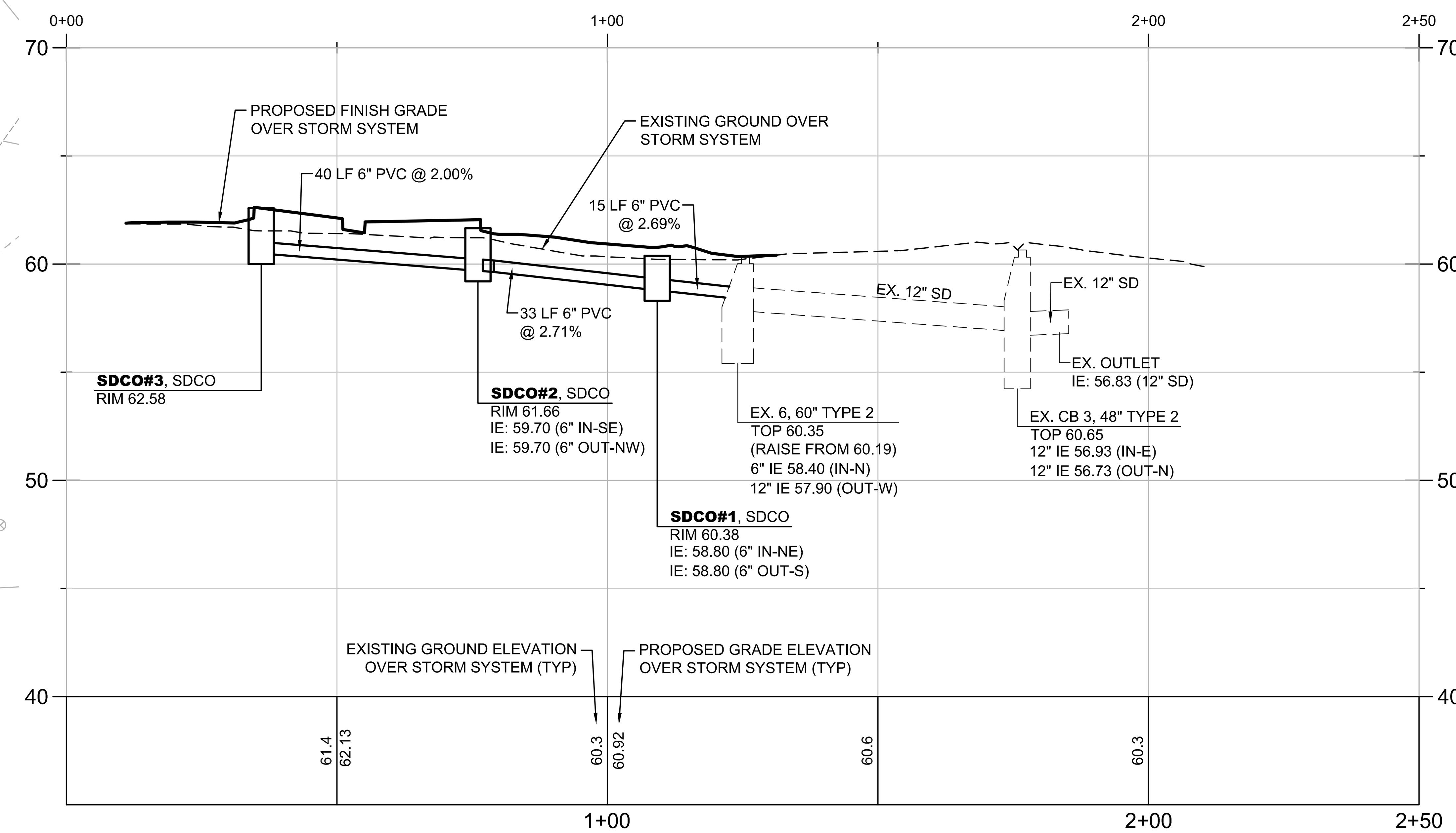
C105
SHEET OF SHEETS

SCALE

20 0 10 20 40

(FEET)
1 INCH = 20 FT.





STORM DRAINAGE PROFILE

SCALE: 1"=20' HORIZ, 1"=5' VERT

CAUTION
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811 Know what's **below.** **Call** before you dig.

By: Tyson Wentz File: P:\H\HEDG00000025\0400CAD\EC\SHEETS\STORM WATER SEWER-UB PERMIT\EC-SD-UB-HEDG0025.dwg
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PROJECT ARCHITECT:				
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REVIEWED BY: RJ				
PERMIT SET FIRST SUBMITTAL	8/2/21			
BID SET	2/9/22			
AS BUILT BY: MM/DD/UB				
	DATE	REVISION	BY	DATE

REGION NO. 10 | STATE: WASH
FEDERAL AID PROJECT NO.
UB PERMIT HEDG00000025
FCR NO:
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CONTRACT NO:

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NORTHUP PREWASH RETROFIT NPDES-NWR

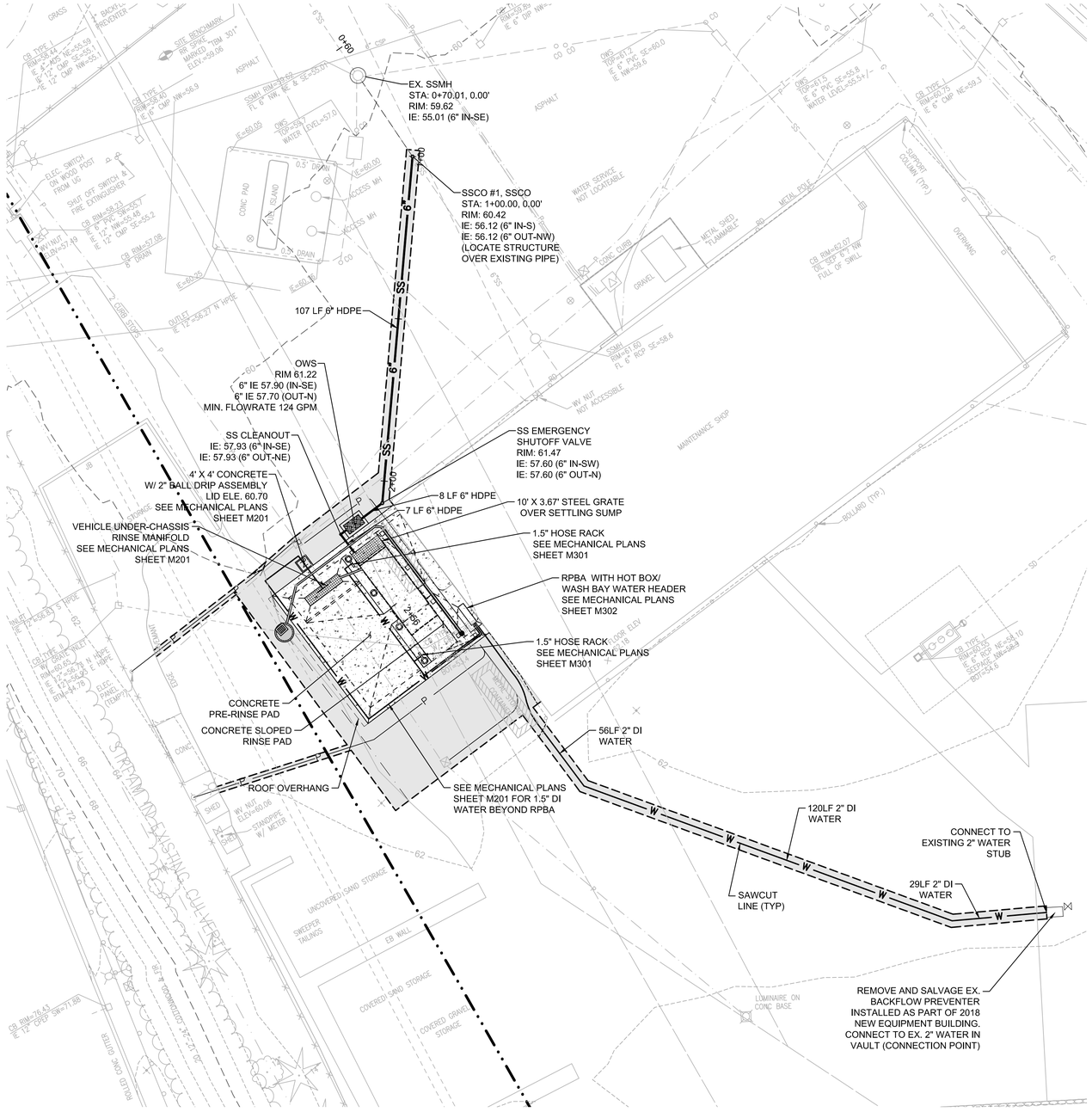
UB PLANS

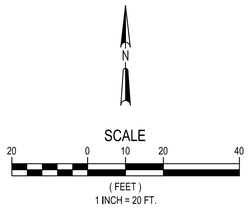
CITY OF BELLEVUE, WA

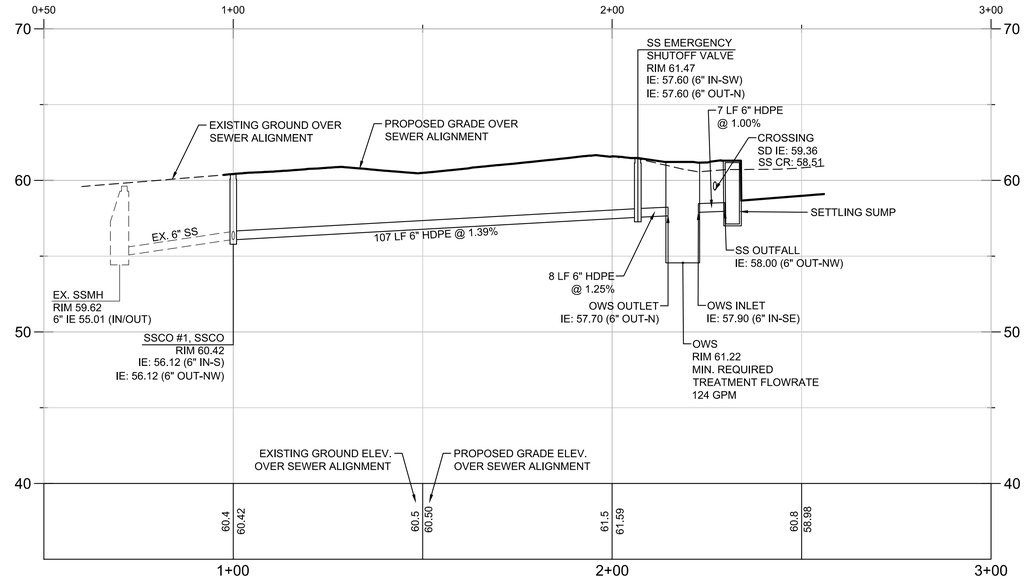
STORM PLAN AND PROFILE

C106

SHEET OF SHEETS







SANITARY SEWER PROFILE

SCALE: 1"=20' HORIZ, 1"=5' VERT

CAUTION
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PROJECT ARCHITECT:					REGION NO. 10	STATE: WASH
DRAWN BY: KMP					FEDERAL AID PROJECT NO.	
REVIEWED BY: TW					**UB PERMIT HEDG00000025**	
REVIEWED BY: RJ						
PERMIT SET FIRST SUBMITTAL	8/2/21				FCR NO:	
BID SET	2/9/22				DESIGN NO:	
AS BUILT BY: MM/DD/UB					CONTRACT NO:	
	DATE	REVISION	BY	DATE		

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Washington State Department of Transportation
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NORTHUP PREWASH RETROFIT NPDES-NWR

UB PLANS

CITY OF BELLEVUE, WA

WATER AND SEWER PLAN AND PROFILE

C107

SHEET OF SHEETS

By: Tyson Wentz
By: TWW File: P:\HHEDG0000002S\040CAD\EC\SHEETS\STORM WATER SEWER-UB PERMIT\EC-WS-UB-HEDG0025.dwg

Plot Date: 2/9/2022 4:17 PM
Save Date: 2/9/2022 3:49 PM
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FLOOR PLAN LEGEND

DESCRIPTION	SYMBOL AND TEXT
AREA IDENTIFICATION room name	ROOM NAME
WORK POINT building corner, starting building layout reference point	WP
STRUCTURAL COLUMN centered on grid line, centered in wall	
DOWNSPOUT refer to plan for size and locations	D.S.
BOLLARD	B

WALL TYPES

DESCRIPTION	SYMBOL AND TEXT
WALL TYPE 1 4" INSULATED METAL WALL PANEL, 1 HOUR FIRE RATED	

GENERAL NOTES

NOTE

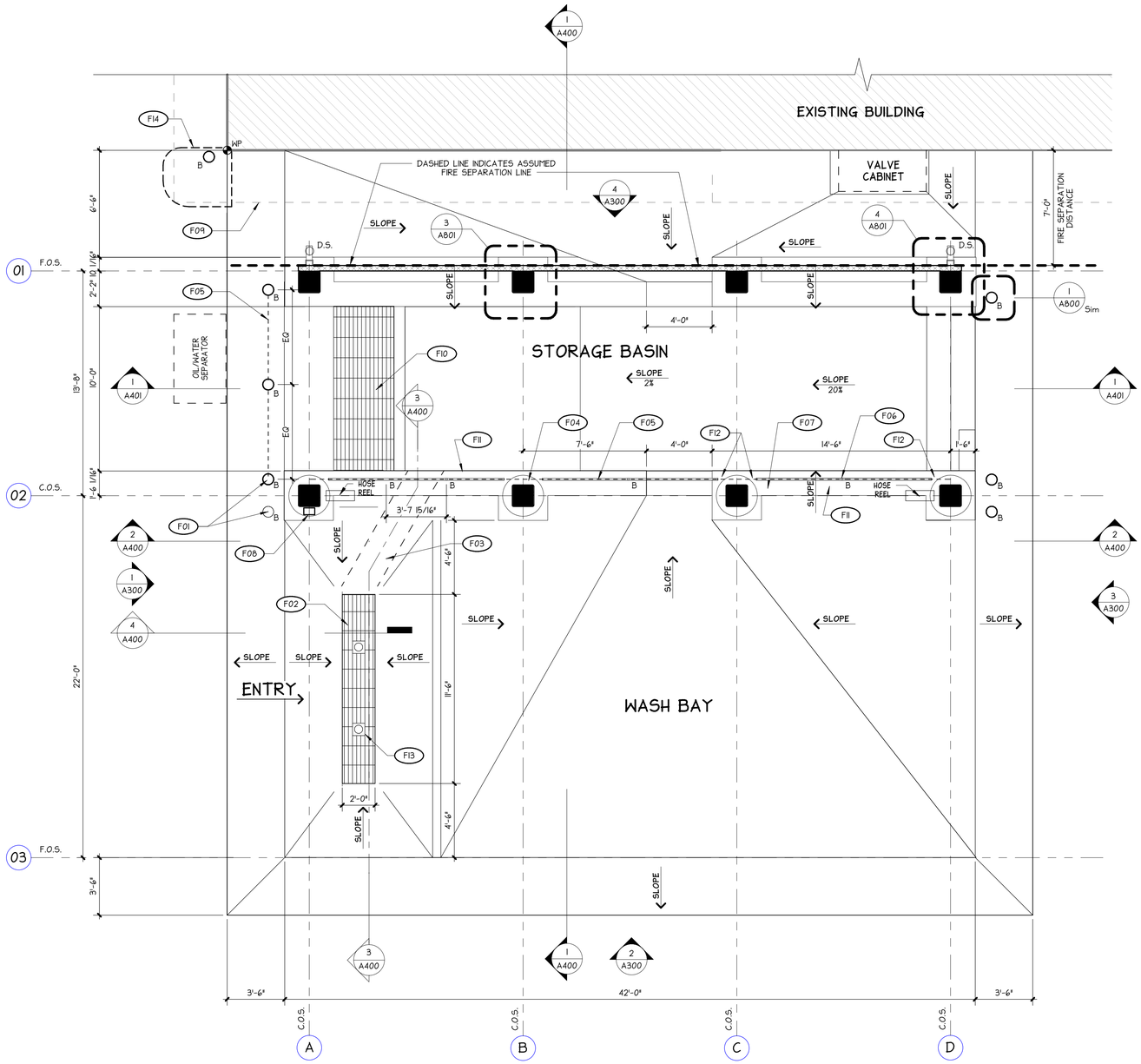
1. ABBREVIATIONS:

   (D) - DEMOLITION
   (R) - RELOCATE
   (E) - EXISTING TO REMAIN
   (S) - SALVAGE

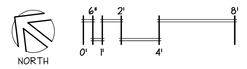
   REFER TO SHEET G020 FOR STANDARD ABBREVIATIONS LIST.

FLOOR PLAN NOTES

SYMBOL	NOTE
F01	8" CONCRETE FILLED PIPE BOLLARD WITH COVER, TYPICAL
F02	UNDER CHASSIS WASH GRATE
F03	SLOPE TO DRAIN, RECTANGLE BLOCK-OUT DRAIN.
F04	24" DIA. STEEL, CONCRETE FILLED PIPE COLUMN PROTECTION (TYP).
F05	STAINLESS STEEL CHAIN, REMOVABLE
F06	CHAIN RAIL POST, REMOVABLE, TYPICAL
F07	SLOPE TOP OF CURB TO DRAIN.
F08	CHASSIS RINSE CONTROLS
F09	OUTLINE OF ROOF ABOVE
F10	CATCH BASIN.
F11	SLOPE OF TOP OF CURB TO DRAIN INTO BASIN.
F12	4" MAX. BETWEEN POST AND COLUMN WRAP.
F13	CHASSIS RINSE.
F14	DEMO EXISTING CURB & BOLLARDS.



1 FLOOR PLAN



PROJECT ARCHITECT: LC					REGION NO.	STATE:
DRAWN BY: EA					FEDERAL AND PROJECT NO.	
REVIEWED BY: LC	2/9/22					
PERMIT SUBMITTAL	8/2/21				JOB NO:	a20-099
BID SET	2/9/22				FCR NO:	
AS-BUILT BY:					DESIGN NO:	
	DATE				CONTRACT NO:	

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

HELIX DESIGN GROUP, INC

Helix design group

6021 12th street east
suite 201
tacoma, wa. 98424
tel: 253.922.9037
fax: 253.922.6499

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

FLOOR PLAN

A100

PLOTTED: 3/4/2022 12:40:35 PM
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PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR

ROOF PLAN LEGEND

DESCRIPTION	SYMBOL AND TEXT
ROOFING IDENTIFICATION material type	SINGLE-PLY MEMBRANE ROOFING
SLOPE IDENTIFICATION direction indicator, rise/run	SLOPE 1/2:12

ROOF PLAN NOTES

SYMBOL	NOTE
R01	EXISTING BUILDING ROOF OUTLINE
R02	FALL PROTECTION ANCHOR
R03	ALUMINUM CROSS-OVER STAIR SYSTEM.
R04	ROOF PROTECTION MATS UNDER STAIR.

GENERAL NOTES

NOTE

1. ABBREVIATIONS:

   (D) - DEMOLITION
   (R) - RELOCATE
   (E) - EXISTING TO REMAIN
   (S) - SALVAGE

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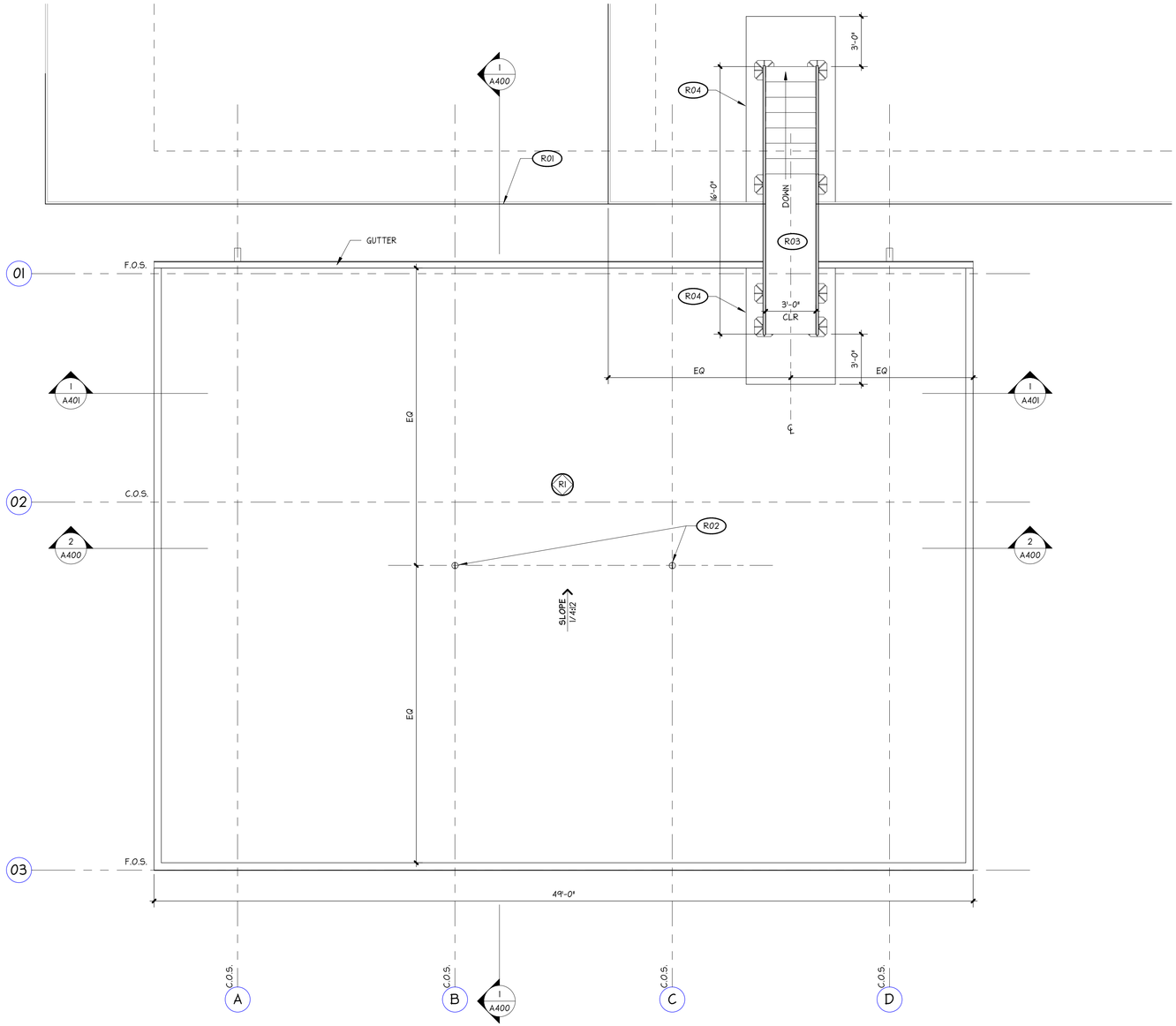

1 ROOF PLAN

NORTH 0' 1' 4' 6" 2' 8'

PLOTTED: 3/4/2022 12:10:35 PM
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PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR

PROJECT ARCHITECT: LC					REGION NO.	STATE:	
DRAWN BY: EA					FEDERAL AND PROJECT NO.		
REVIEWED BY: LC	2/9/22						
PERMIT SUBMITTAL	8/2/21				JOB NO:	a20-099	
BID SET	2/9/22				FCR NO:		
AS-BUILT BY:					DESIGN NO:		
	DATE				CONTRACT NO:		

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON
HELIX DESIGN GROUP, INC

Helix design group

6021 12th street east
suite 201
tacoma, wa. 98424
tel: 253.922.9037
fax: 253.922.6499

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

ROOF PLAN

A110

CEILING LEGEND

DESCRIPTION	SYMBOL AND TEXT
METAL SOFFIT PANEL	
VENTED METAL PANEL	
FLOOD LIGHT FIXTURE	

CEILING PLAN NOTES

SYMBOL	NOTE
C01	EXISTING BUILDING ROOF OUTLINE
C02	RECESSED LED LIGHT FIXTURE, TYPICAL
C03	LED FLOOD LIGHT, TYPICAL
C04	VENTED METAL PANEL, TYPICAL
C05	SOLID METAL PANEL, BEAM WRAP (TYPICAL)
C06	LIGHT FIXTURE

GENERAL NOTES

NOTE

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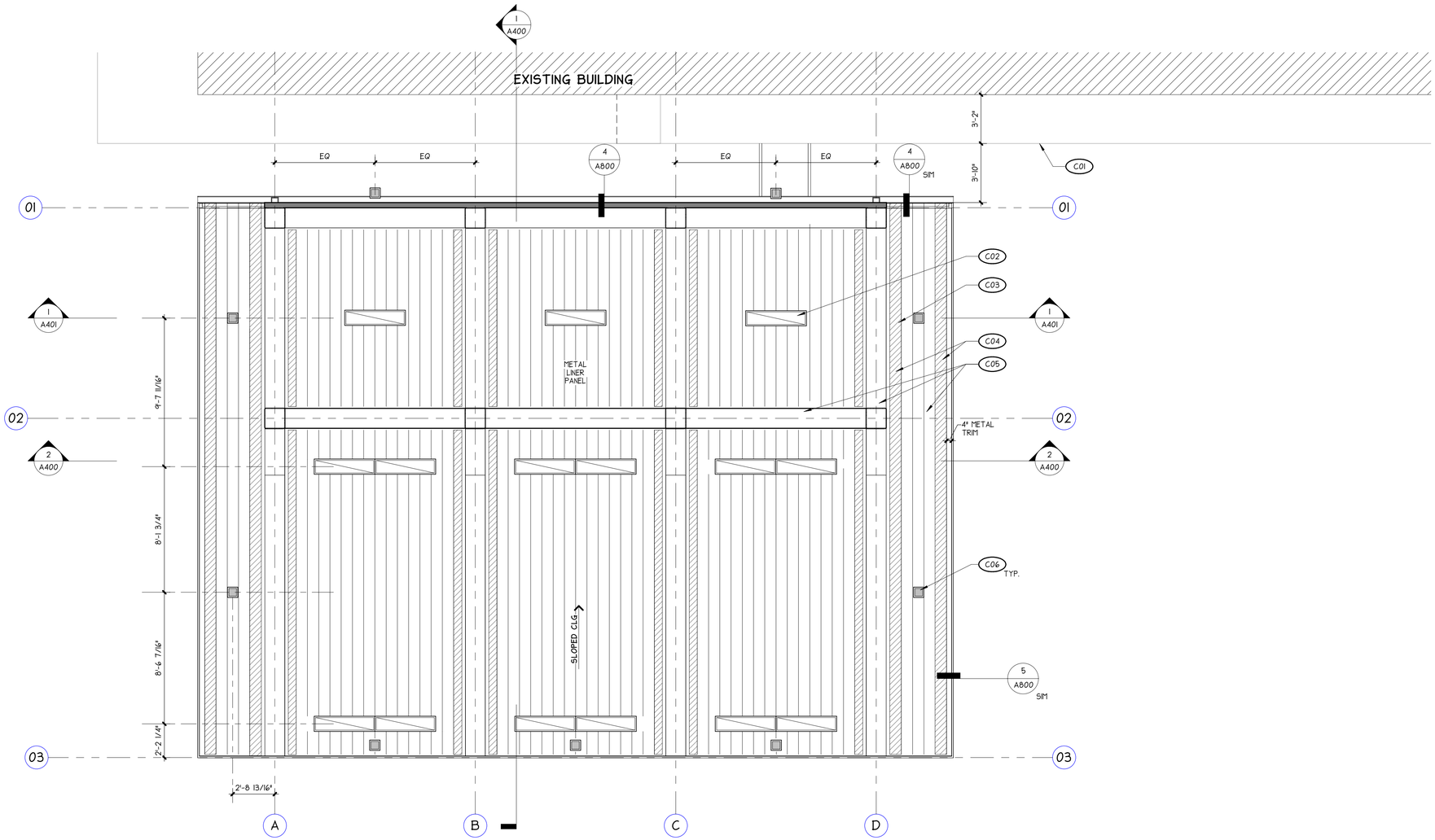
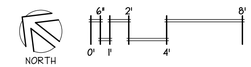


1 REFLECTED CEILING PLAN



PROJECT ARCHITECT: LC					REGION NO.	STATE:	
DRAWN BY: EA					FEDERAL AND PROJECT NO.		
REVIEWED BY: LC	2/9/22						
PERMIT SUBMITTAL	8/2/21				JOB NO:	a20-099	
BID SET	2/9/22				FCR NO:		
AS-BUILT BY:					DESIGN NO:		
	DATE				CONTRACT NO:		

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

HELIX DESIGN GROUP, INC

Helix design group

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fax: 253.922.6499

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

REFLECTED CEILING PLAN

A120

PLOTTED: 3/4/2022 12:10:35 PM
FILE PATH: C:\Users\elia\Desktop\Revit 2021 Projects\a20-099-Northup Maint. Facility Pre-Wash Station r21_elialampay23791.rvt
PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR

ELEVATION LEGEND

DESCRIPTION	SYMBOL AND TEXT
W = wall type R = roof type S = soffit type F = floor type	(W)
ELEVATION surface type designation T.O.F. = top of floor T.O.B. = top of bearing T.O.W. = top of wall (E) = existing	T.O.F.

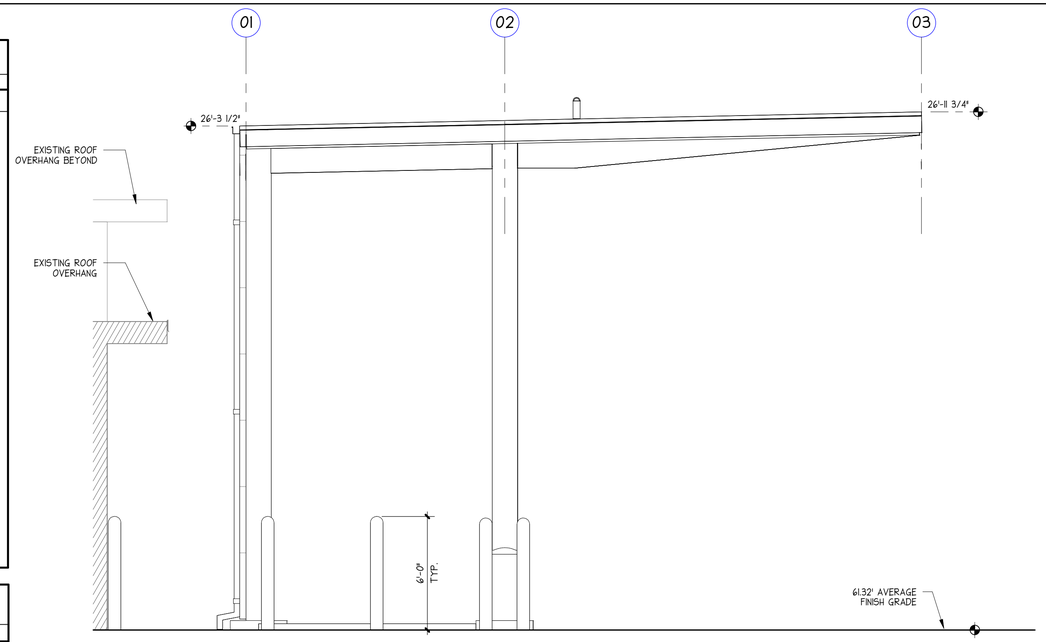
GENERAL NOTES

NOTE

1. REFER TO BUILDING ASSEMBLY LEGEND ON SHEET G030 FOR ASSEMBLY TYPES.
2. ABBREVIATIONS:
   (D) - DEMOLITION
   (R) - RELOCATE
   (E) - EXISTING TO REMAIN
   (S) - SALVAGE
3. REFER TO SHEET G020 FOR STANDARD ABBREVIATIONS LIST.
4. PAINT ALL EXPOSED CONDUITS AND PIPES; MATCH COLOR OF ADJACENT MATERIAL.

ELEVATION NOTES

SYMBOL	NOTE
E01	+



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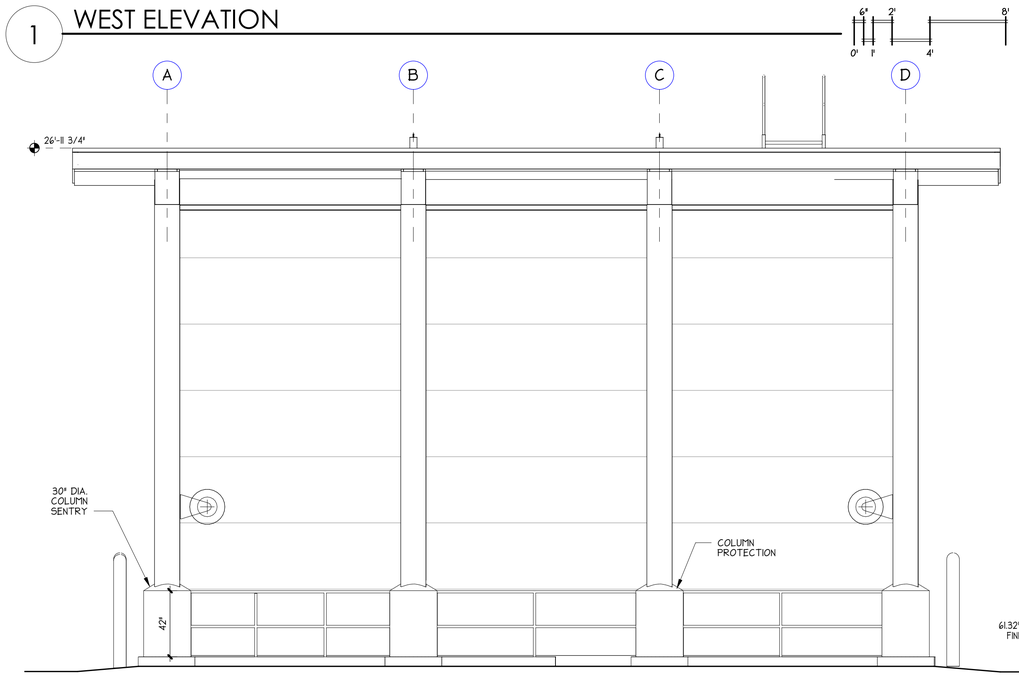

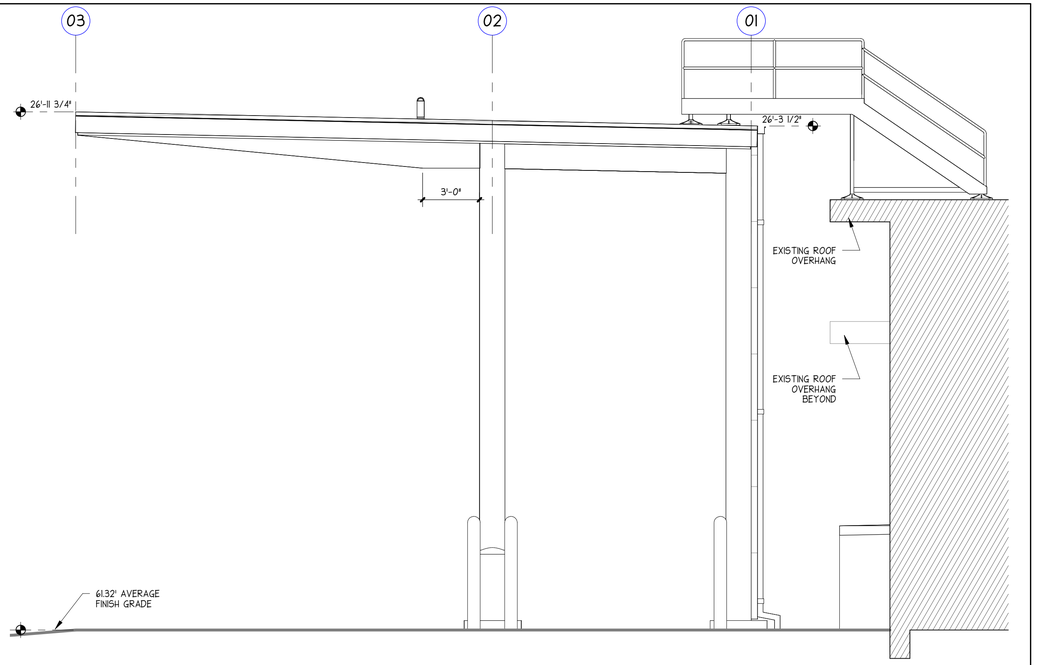

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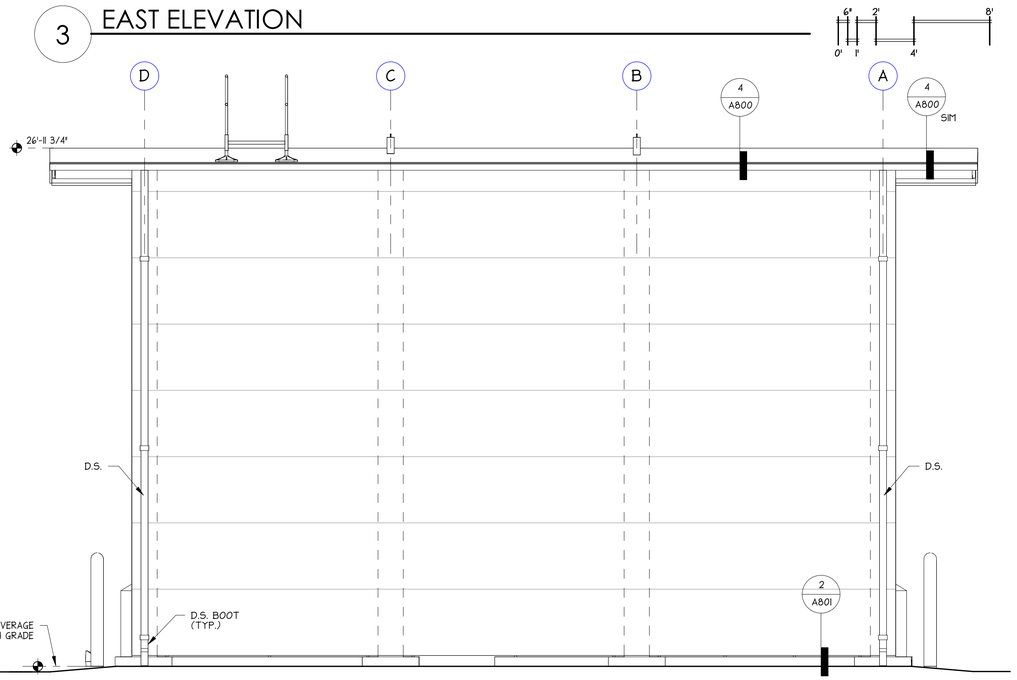
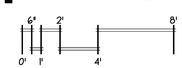


2 SOUTH ELEVATION

4 NORTH ELEVATION



PROJECT ARCHITECT: LC				REGION NO.	STATE:
DRAWN BY: EA				FEDERAL AND PROJECT NO.	
REVIEWED BY: LC	2/9/22				
PERMIT SUBMITTAL	8/2/21			JOB NO:	a20-099
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	DATE			CONTRACT NO:	

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

EXTERIOR ELEVATIONS

A300

PLOTTED: 3/4/2022 12:10:37 PM
FILE PATH: C:\Users\elia\Desktop\Revit 2021 Projects\a20-099-Northup Maint. Facility Pre-Wash Station r2L-eliadampp2379.rvt

PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR

SECTION LEGEND

DESCRIPTION	SYMBOL AND TEXT
ASSEMBLY TYPES W = wall type R = roof type S = soffit type F = floor type	W1
ELEVATION surface type designation T.O.F. = top of floor T.O.B. = top of bearing T.O.W. = top of wall (E) = existing	T.O.F.

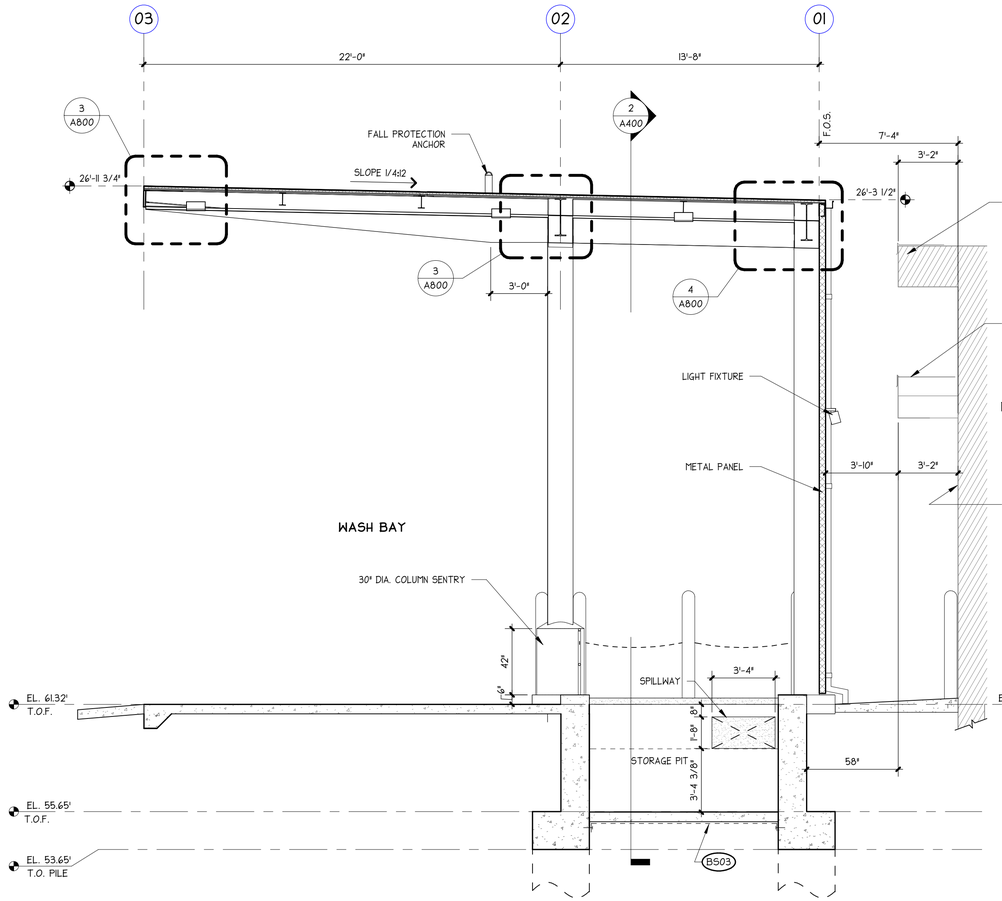
SECTION NOTES

SYMBOL	NOTE
B501	MINIMUM SEPARATION BETWEEN FACE OF EXISTING OVERHANGS AND 1-HR RATED WALL IS 3'-4" PER CODE. COORDINATE FOUNDATION SETBACK DISTANCE TO MAINTAIN SEPARATION REQUIREMENTS.
B502	FOUNDATION SETBACK.
B503	UNDER SLAB WATERPROOFING MEMBRANE

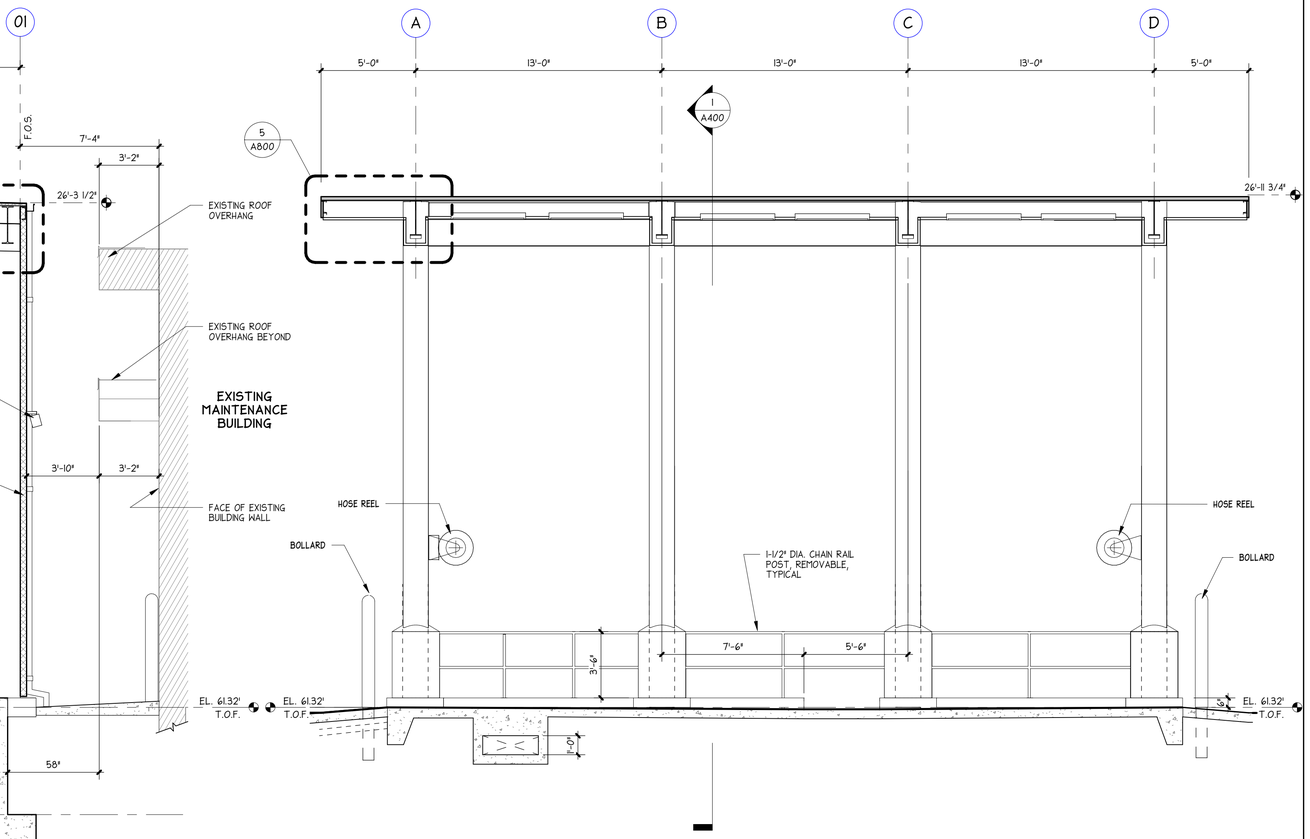
GENERAL NOTES

NOTE

1. REFER TO BUILDING ASSEMBLY LEGEND FOR ASSEMBLY TYPES.
2. ABBREVIATIONS:
   - (D) - DEMOLITION
   - (R) - RELOCATE
   - (E) - EXISTING TO REMAIN
   - (S) - SALVAGE
3. REFER TO SHEET G020 FOR STANDARD ABBREVIATIONS LIST.



1 BUILDING SECTION



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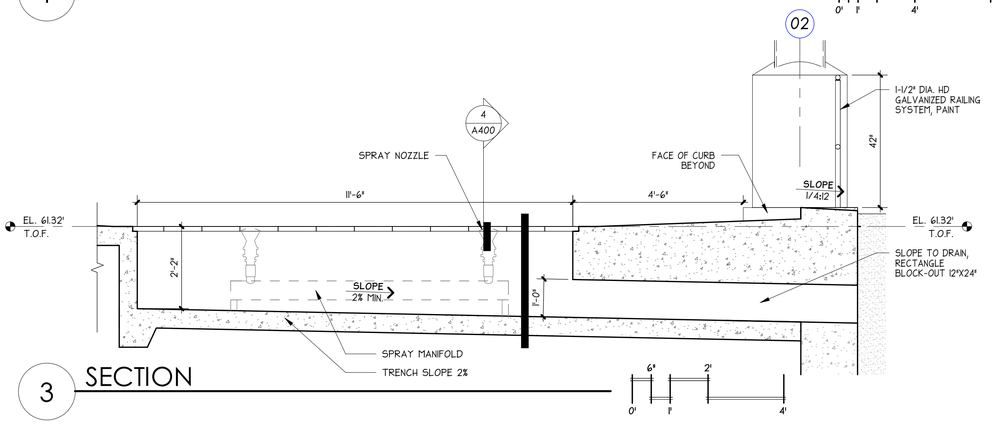
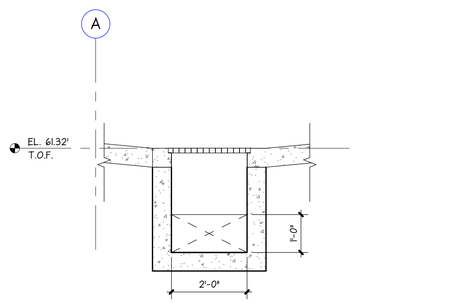


3 SECTION



4 SECTION

PROJECT ARCHITECT: LC						REGION NO.	STATE:
DRAWN BY: EA						FEDERAL AND PROJECT NO.	
REVIEWED BY: LC	2/9/22						
PERMIT SUBMITTAL	8/2/21					JOB NO:	a20-099
BID SET	2/9/22					FCR NO:	
AS-BUILT BY:						DESIGN NO:	
	DATE					CONTRACT NO:	

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

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NORTHUP PREWASH
RETROFIT NPDES - NWR
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BUILDING SECTIONS

A400

PLOTTED: 3/4/2022 12:10:39 PM
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PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR

SECTION LEGEND

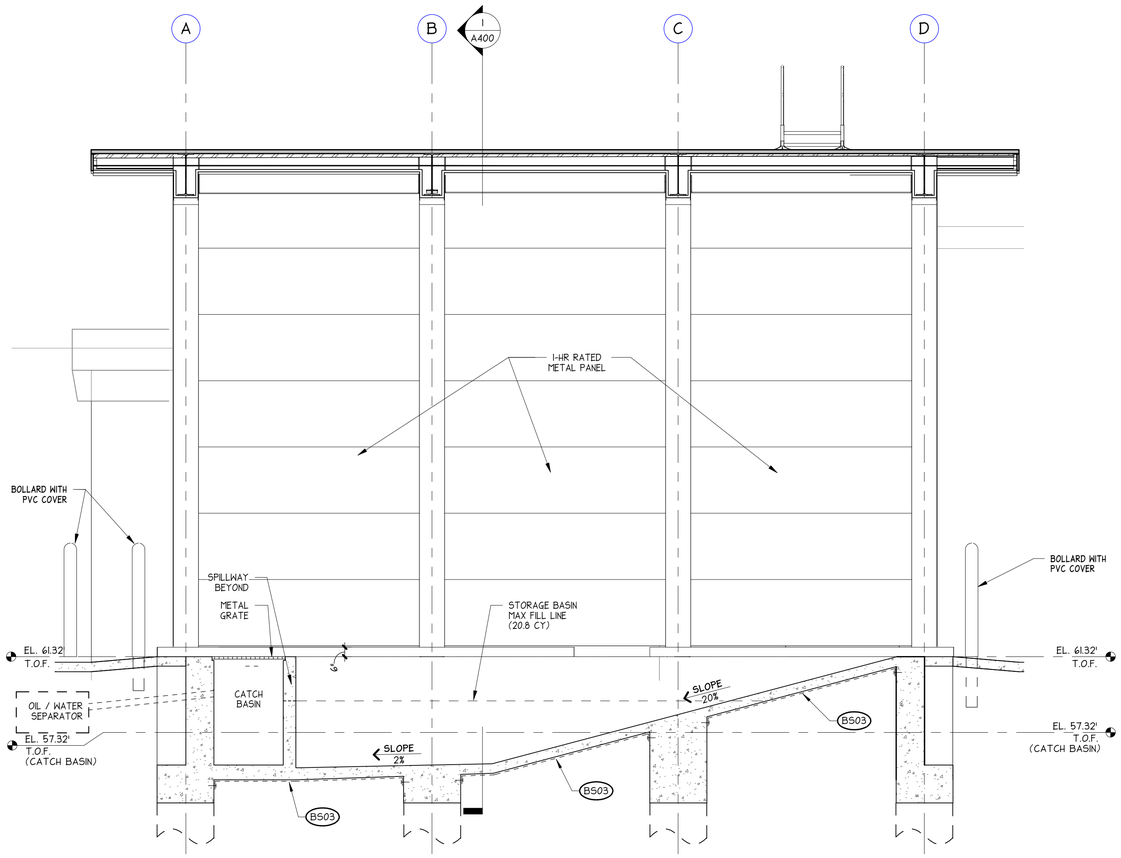
DESCRIPTION	SYMBOL AND TEXT
ASSEMBLY TYPES W = wall type R = roof type S = soffit type F = floor type	W1
ELEVATION surface type designation T.O.F. = top of floor T.O.B. = top of bearing T.O.W. = top of wall (E) = existing	T.O.F.

SECTION NOTES

SYMBOL	NOTE
B501	MINIMUM SEPARATION BETWEEN FACE OF EXISTING OVERHANGS AND 1-HR RATED WALL IS 3'-4" PER CODE. COORDINATE FOUNDATION SETBACK DISTANCE TO MAINTAIN SEPARATION REQUIREMENTS.
B502	FOUNDATION SETBACK.
B503	UNDER SLAB WATERPROOFING MEMBRANE

GENERAL NOTES

NOTE
1. REFER TO BUILDING ASSEMBLY LEGEND FOR ASSEMBLY TYPES.
2. ABBREVIATIONS: (D) - DEMOLITION (R) - RELOCATE (E) - EXISTING TO REMAIN (S) - SALVAGE
3. REFER TO SHEET G020 FOR STANDARD ABBREVIATIONS LIST.



1 BUILDING SECTION

BXUV.U050 - Fire-resistance Ratings - ANSI/UL 263

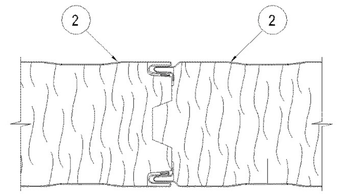
BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

Design No. U050

March 22, 2018

Nonbearing Wall Rating - 1, 2 or 3 HR (See Item 2)

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL**



1. **Perimeter Supports —** (Not shown) may be the wall structural members, single or double sheeting angles or channels. The panel attachment flanges to be min. 2 in. (51 mm) width and min. 16 ga. Securement of sheeting angles and channels as required. As an alternate to the perimeter supports listed above when the panels are installed horizontally, a base clip channel (min. 18ga.) designed to fit the joint detail of the panels, supplied by manufacturer of panels, may be used at the bottom. Metal flashings may be installed prior to the perimeter supports.

2. **Units, Partition Panel* —** Metal faced panels, nom 42 in.(1067 mm) wide by nom. 4 in.(102 mm) thick (for the 1 Hour Rating) nom. 7 in.(178 mm) thick (for the 2 Hour Rating) or nom. 8 in.(203 mm) thick (for the 3 hour rating) installed vertically or horizontally. Panels supplied factory double tongue and grove joint.
Secured to single supports, through panel into top and bottom supports (when installed vertically) or side supports (when installed horizontally) with min. No. 14 self drilling or self tapping steel screws of min. length required for full thread engagement, spaced 18 in.(457 mm) OC and 3 in.(76 mm) from each joint.

Secured to double supports and channels, through top and bottom supports into panel faces (when installed vertically) or through side supports into panel faces (when installed horizontally) with min. No. 12 self drilling or self tapping steel screws of min. length required for full thread engagement, spaced 12 in. (305 mm) OC.

For the 3 hour rating, 1/8 in.(3.2 mm) diameter steel or stainless steel pop rivets shall be installed through the tongue and groove joint 1/4 in.(6 mm) from the panel edge and 3 ft.(915 mm) on center along the length of the joint. The rivets shall be long enough to secure the exterior face of the male edge of the tongue and groove joint (single layer of metal skin) to the exterior face of the female edge of the tongue and groove joint (double layer of metal skin). As an alternate to the rivets, min. No. 6-20 x 3/8 in.(10 mm) long carbon or stainless steel self-drilling screws may be used. The rivets or screws may be eliminated on one side of the assembly. When the rivets or screws are eliminated on one side of the assembly, the rating is limited to fire exposure on the side of the assembly with the rivets or screws only.

METL-SPAN, A DIVISION OF NCI GROUP, INC. — Type ThermalSafe

MBCI — Type Eco-Ficient

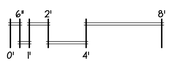
CENTRIA, A DIVISION OF NCI GROUP, INC — Type TotalClad MW

3. **Caulking Compound —** (Not shown) - Optional - A bead of silicone sealant may be placed into the panels joints on either or both sides of the panels.

4. **Perimeter Insulation —** (Not shown) — Any mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance stuffed at the ends of the panels at the perimeter where gaps may occur.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2018-03-22



2 RATED ASSEMBLY

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DRAWN BY: EA				FEDERAL AND PROJECT NO.	
REVIEWED BY: LC	2/9/22				
PERMIT SUBMITTAL	8/2/21			JOB NO:	a20-099
BID SET	2/9/22			FCR NO:	
AS-BUILT BY:				DESIGN NO:	
	DATE			CONTRACT NO:	

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON

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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

BUILDING SECTION

A401

PLOTTED: 3/4/2022 12:09:39 PM
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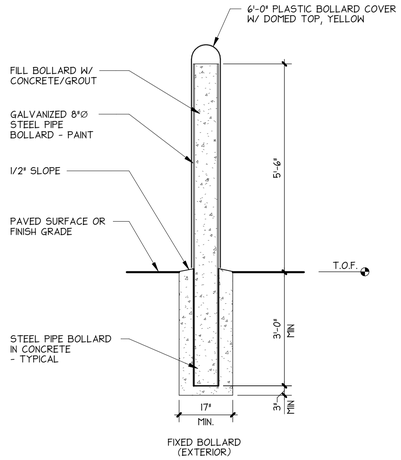
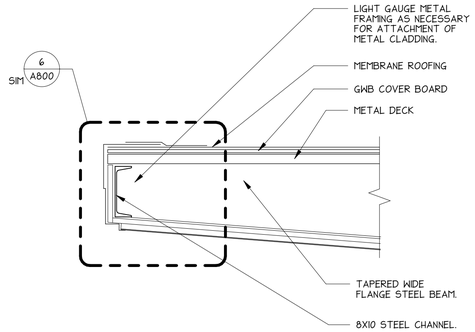
PROJECT: a20-099 - NORTHUP PREWASH RETROFIT NPDES - NWR



FIXED BOLLARD (EXTERIOR)

1 DETAIL



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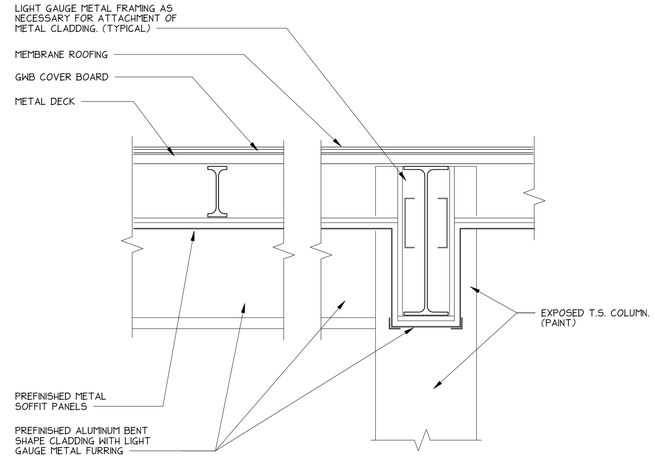

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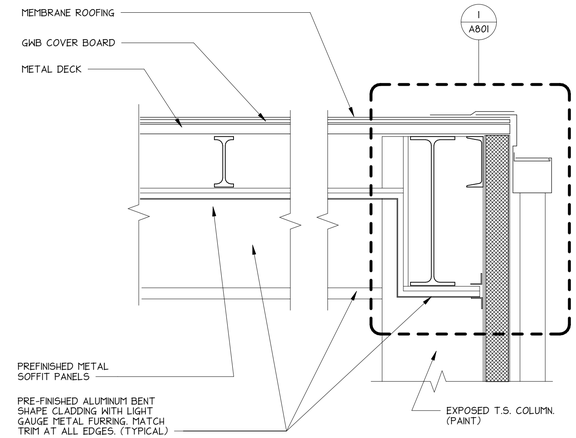

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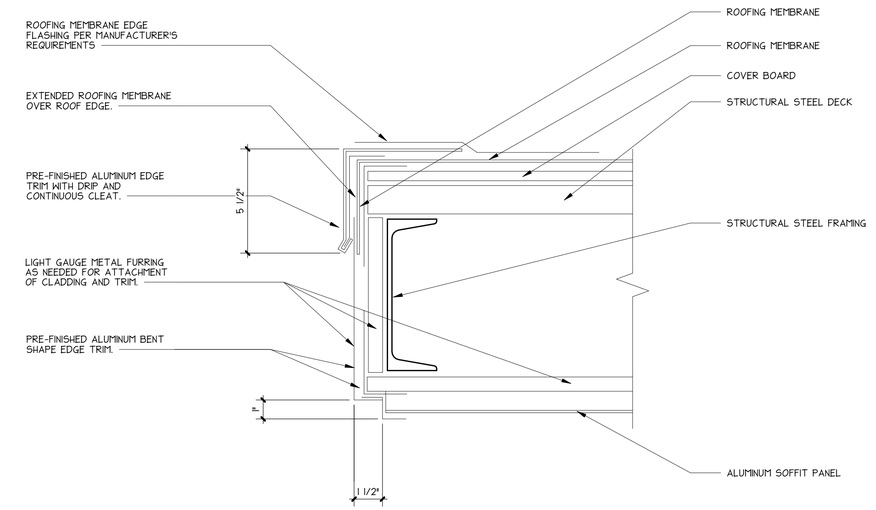
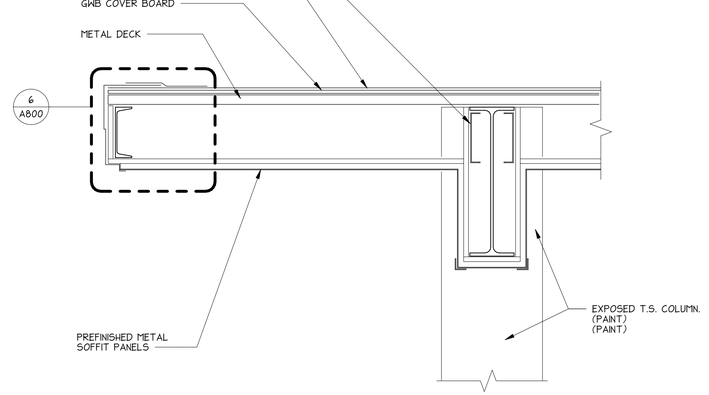


6 DETAIL



5 DETAIL

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PROJECT ARCHITECT: LC					REGION NO.	STATE:	
DRAWN BY: EA					FEDERAL AND PROJECT NO.		
REVIEWED BY: LC	2/9/22						
PERMIT SUBMITTAL	8/2/21				JOB NO:	a20-099	
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	DATE				CONTRACT NO:		

6934 REGISTERED ARCHITECT LOWELL CATE STATE OF WASHINGTON
HELIX DESIGN GROUP, INC

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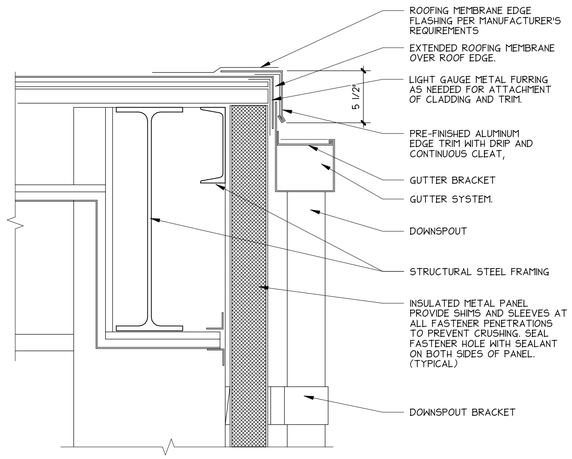
Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

SITE DETAILS

A800



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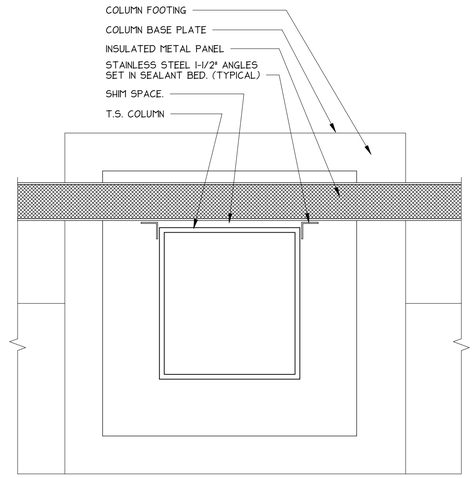

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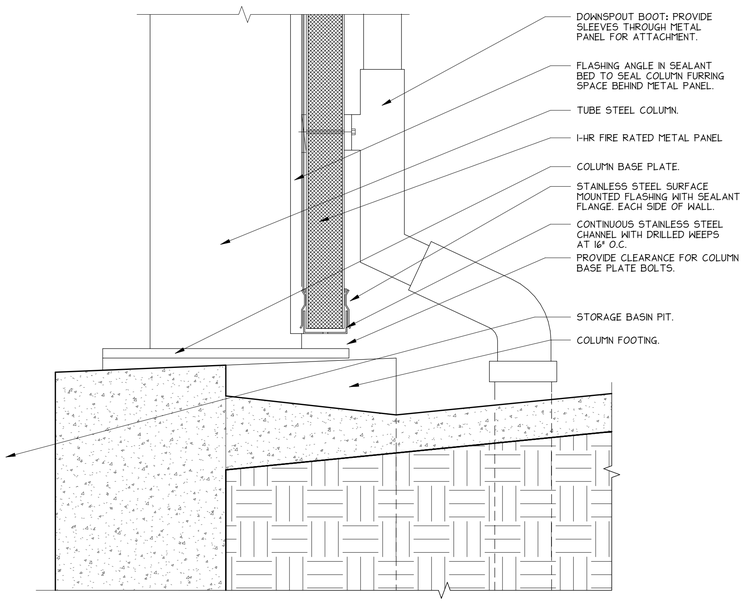
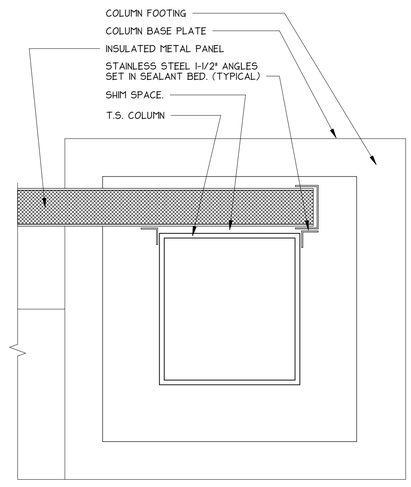


2 DETAIL



4 DETAIL

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DRAWN BY: EA					FEDERAL AND PROJECT NO.		
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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

SITE DETAILS

A801

GENERAL NOTES:

1. MATERIALS AND WORKMANSHIP TO CONFORM WITH THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE AS ADOPTED BY THE CITY OF BELLEVUE AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
2. REFERENCE TO CODES, RULES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST PRINTED EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND FOR VERIFYING ALL DIMENSIONS BEFORE CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST DAMAGE BY FALLING DEBRIS AND OTHER HAZARDS IN CONNECTION WITH THIS WORK.
5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE ENGINEER.
6. DO NOT SCALE THE DRAWINGS.
7. THE DRAWINGS INDICATE THE STRUCTURE IN ITS FINAL CONDITION. THE CONTRACTOR SHALL PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO, BRACING, SHORING, AND SEQUENCING TO MAINTAIN STABILITY DURING CONSTRUCTION. RETAIN A REGISTERED CIVIL ENGINEER WHOM IS PROPERLY QUALIFIED TO DESIGN BRACING, SHORING, ETC. VISITS TO THE SITE BY THE ENGINEER WILL NOT INCLUDE OBSERVATION OF THE ABOVE NOTED ITEMS.
8. THIS WORK OCCURS AT AN EXISTING FACILITY. INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT IS WITHOUT GUARANTEE OF ACCURACY. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND REPORT CONFLICTS WITH THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION OR ERECTION/INSTALLATION. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE ENGINEER.
9. SHOP DRAWINGS, AS REQUIRED BY THE SPECIFICATIONS, SHALL BE SUBMITTED AND SHALL HAVE RECEIVED ACCEPTANCE BY THE ENGINEER PRIOR TO FABRICATION OR ERECTION/INSTALLATION.
10. THE ENGINEER OF RECORD WILL REVIEW BUILDING COMPONENTS ENGINEERED BY OTHERS FOR CONFORMANCE WITH THE PROJECT SPECIFICATIONS. THE ENGINEER OF RECORD IS NOT IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE COMPONENTS BUT HAS PROVIDED THE SPECIFICATIONS AND DESIGN CRITERIA TO WHICH THESE COMPONENTS ARE TO BE DESIGNED. THE ENGINEER OF RECORD HAS DESIGNED THE BUILDING STRUCTURE FOR CONCENTRIC LOADING FROM THESE COMPONENTS.
11. THE CONTRACTOR SHALL VERIFY THE FINAL LOCATION OF ALL EQUIPMENT, SUPPORTS, AND SEISMIC RESTRAINTS PRIOR TO FABRICATION. IDENTIFICATION OF EXISTING UTILITIES THAT INTERFERE WITH EQUIPMENT INSTALLATION IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF FIELD CONDITIONS RESTRICT THE INSTALLATION OF COMPONENTS OR RESTRAINTS SHOWN ON THE CONSTRUCTION DOCUMENTS.
12. THIS WORK OCCURS WITHIN/NEAR AN OPERATING FACILITY. COORDINATE ALL CONSTRUCTION ACCESS AND OPERATIONS TO AVOID DISRUPTION TO ONGOING FACILITY OPERATIONS.
13. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
    - A. SIZE AND LOCATION OF ALL OPENINGS, EXCEPT AS NOTED.
    - B. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NONBEARING PARTITIONS.
    - C. SIZE AND LOCATION OF ALL CONCRETE CURBS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGES IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
    - D. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS, EXCEPT AS...
    - E. FLOOR AND ROOF FINISHES.
    - F. STAIR AND LADDER FRAMING AND DETAILS, EXCEPT AS SHOWN.
    - G. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
14. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE...
    - A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
    - B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
    - C. CONCRETE INSERTS FOR FIXTURES
    - D. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
    - E. SEISMIC BRACING REQUIREMENTS.

DESIGN CRITERIA:

1. THE FOLLOWING NOTES APPLY UNO ON PLANS OR SPECIFICATIONS. IN THE CASE OF CONFLICT WITH PLANS OR SPECIFICATIONS, THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY. NOTES AND DETAILS IN THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL STRUCTURAL NOTES AND TYPICAL.
2. GRAVITY LOADS:

ROOF:

ROOF LIVE	20 PSF
SNOW	
GROUND SNOW LOAD (Pg)	20 PSF
FLAT ROOF SNOW LOAD (Pf)	25 PSF
SNOW EXPOSURE FACTOR (Ce)	1.0
SNOW IMPORTANCE FACTOR (I)	1.0
THERMAL FACTOR (Ct)	1.2

3. SEISMIC (PER ASCE 7-16)

RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR (I)	1.0
0.2 SEC MAPPED SPECTRAL RESPONSE (Ss)	1.296 g
1.0 SEC MAPPED SPECTRAL RESPONSE (S1)	0.451 g
SITE CLASS	D
0.2 SEC SPECTRAL RESPONSE COEFF(Sds)	1.04 g
1.0 SEC SPECTRAL RESPONSE COEFF(Sd1)	0.560 g
BASIC SEISMIC-FORCE RESISTING SYSTEM (SHELL):	
STEEL ORDINARY MOMENT FRAMES (OMF)	
DESIGN BASE SHEAR (V)	V = Cs * BLDG WT
SEISMIC RESPONSE COEFFICIENT (Cs)	0.31
RESPONSE MODIFICATION FACTOR (R)	3.5

ANALYSIS PROCEDURE USED:

EQUIVALENT LATERAL FORCE PROCEDURE

4. WIND (PER ASCE 7-16)

BASIC WIND SPEED (P)	98 MPH
EXPOSURE	C
WIND DIRECTIONALITY FACTOR (Kd)	0.85
WIND TOPOGRAPHIC FACTOR (Kzt)	0.94
GUST EFFECT FACTOR (Gf)	0.85

FOUNDATION AND SITE WORK:

1. THE DESIGN OF THE FOUNDATION SYSTEM IS BASED UPON THE CRITERIA AND RECOMMENDATIONS CONTAINED IN THE SR-520 WSDOT NORTHUP MAINTENANCE FACILITY NEW BUILDING DATED OCTOBER 23, 2013. REPORT IS AVAILABLE FOR REVIEW.
2. PILE CAPACITES ARE IN THE GEOTECHNICAL REPORT LISTED ABOVE
3. CONTRACTOR WILL PROVIDE DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE, GROUND, OR SEEPAGE WATER AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
4. LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
5. NOTIFY THE OWNER'S REPRESENTATIVE IF ANY BURIED STRUCTURES NOT INDICATED, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, UTILITIES, ETC., ARE FOUND.
6. SITE PREPARATION, OVEREXCAVATION/RECOMPACTION OF SOILS AND THE INSTALLATION OF FOUNDATION AND WALL DRAINS AS REQ'D SHALL BE PERFORMED IN ACCORDANCE WITH RECOMMENDATIONS PRESENTED IN THE SOILS REPORT REFERENCED ABOVE.
7. FILL PLACED WITHIN BUILDING PAD AREAS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND COMPACTED TO A MINIMUM OF 92 PERCENT MODIFIED PROCTOR, ASTM D1557. FILL SHALL BE PLACED UNDER OBSERVATION OF THE GEOTECHNICAL ENGINEER.
8. REMOVE LOOSE SOIL AND STANDING WATER FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING CONCRETE.
9. EXCAVATIONS FOR FOUNDATIONS MUST BE ACCEPTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE GEOTECHNICAL ENGINEER WHEN EXCAVATIONS ARE READY FOR INSPECTION.
10. PLACE BACKFILL BEHIND RETAINING WALLS AFTER CONCRETE HAS ATTAINED FULL DESIGN STRENGTH.
11. MECHANICALLY COMPACT EXCAVATION BACKFILLS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

FORMWORK:

1. FORMWORK, SHORING, AND RESHORING SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK".
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF FORMWORK, SHORING, AND RESHORING.
3. PROVIDE POUR POCKETS IN FORMS AND UNDER EXISTING STRUCTURAL MEMBERS AS REQUIRED TO PREVENT AIR POCKETS AND/OR THE EXISTING MEMBERS. CONCRETE CAST WITH AIR POCKETS AND/OR " HONEYCOMB " UNDER OR AROUND THE MEMBERS IS NOT ACCEPTABLE.
4. REMOVE FORMS AND SHORES IN ACCORDANCE WITH THE FOLLOWING:

LOCATION	REMOVE FORMS AND SHORES NO SOONER THAN
BOTTOM FORMS AND SHORES FOR MILDLY REINFORCED SLABS, BEAMS, AND GIRDERS	72 HOURS, F'C = 3500 PSI MINIMUM
SIDE FORMS FOR BEAMS	72 HOURS, F'C = 3500 PSI
COLUMNS AND WALLS	72 HOURS
FOOTINGS	48 HOURS
ELEVATED SLABS	14 DAYS

5. PROVIDE CURING WHERE FORMS ARE REMOVED IN LESS THAN 7 DAYS, INCLUDING BUT NOT LIMITED TO WALLS, COLUMNS, AND UNDERSIDE OF ELEVATED SLABS.
6. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" TYP UNO.

REINFORCING STEEL:

1. ALL REINFORCING TO BE EPOXY COATED.
2. FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI MSP-1 " MANUAL OF STANDARD PRACTICE" AND AC1 301, "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS".
3. REINFORCING TO CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

LOCATION	TYPE
REINFORCING STEEL #7 AND SMALLER	ASTM A615, 60 KSI
REINFORCING STEEL #8 AND LARGER AND REINFORCING STEEL TO BE WELDED	ASTM A706, 60 KSI

4. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS, AND HANGERS AT A MAXIMUM 3-FOOT SPACING.
5. PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICABLE. SPLICES SHALL BE LAPPED AS NOTED IN THE SPLICE TABLE.
6. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY STRUCTURAL ENGINEER. IF APPROVED WELD REINFORCING STEEL IN ACCORDANCE WITH AWS D1.4 USING QUALIFIED WELDERS.

METAL DECKING:

1. ALL METAL DECK SHALL BE APPROVED BY THE ICBO, STEEL DECK INSTITUTE (SDI) AND/OR ALL GOVERNING AGENCIES.
2. FLOOR DECK:
    - A. THE STEEL FLOOR DECK AND ALL FLASHING SHALL BE FORMED FROM STEEL SHEETS
3. ALL METAL DECK GAGES SHOWN ON THE FLOOR AND ROOF PLANS ASSUME A CONTINUOUS DECK SPANNING OVER THREE SUPPORTS. THE CONTRACTOR SHALL PROVIDE HEAVIER GAGES WHERE THIS SUPPORT CONDITIONS IS NOT ATTAINED UNLESS ADEQUATE SHORING IS PROVIDED.

CAST-IN-PLACE CONCRETE:

1. CONCRETE PLACEMENT AND CURING SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
2. CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE ENGINEER OF RECORD.
3. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND REVIEWED BY THE ENGINEER. MIX DESIGNS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.
4. ROUGHEN CONCRETE SURFACES OF CONSTRUCTION JOINTS TO ¼ INCH AMPLITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES. LOCATE CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS. SUBMIT ALTERNATE JOINT LOCATIONS OR JOINTS NOT SHOWN TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL.
5. PRIOR TO PROCEEDING WITH THE WORK.
6. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF ADDITIONAL CONCRETE CURBS AND HOUSEKEEPING PADS NOT SHOWN.
7. CONCRETE CLEAR COVER TO REINFORCING BARS IS AS FOLLOWS, UNLESS OTHERWISE NOTED:

	CLEARCOVER
CONCRETE PLACED AGAINST EARTH	3 INCHES
FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH EARTH: #6 BARS AND LARGE #5 BARS AND SMALLER	2 INCHES 1 1/2 INCHES
SLABS ON GRADE (TOP CLEARANCE)	1 1/2 INCHES
BEAMS, GIRDERS AND COLUMNS NOT EXPOSED TO WEATHER OR EARTH	1 1/2 INCHES
WALL OR SLAB SURFACES NOT EXPOSED TO WEATHER OR EARTH: #5 & SMALLER #6 & #7 #8,#9, #10 & #11 #14 & #18	3/4 INCH 1 INCH 1 1/2 INCHES 2 1/2

8. CONCRETE TYPES:

28-DAY STRENGTH	TYPE	LOCATION
3000 PSI	NORMAL WEIGHT	CURBS, HOUSEKEEPING PADS, ETC.
4000 PSI	NORMAL WEIGHT	FOUNDATIONS, COLUMNS, WALLS, BEAMS, SLAB ON GRADE.

9. CONTINUOUSLY MOIST CURE CONCRETE SLABS FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS, OR MOISTURE RETAINING COVERS MAY BE USED. CURING COMPOUNDS THAT HAVE A DEMONSTRATED COMPATIBILITY WITH THE FINISH FLOORING SYSTEM MAY BE USED WHERE APPROVED BY THE OWNER'S REPRESENTATIVE.
10. CONCRETE FILL THICKNESS SHOWN ON THE FRAMING PLANS ARE MINIMAL THICKNESSES. NO ALLOWANCES HAVE BEEN SHOWN FOR ADDITIONAL CONCRETE FILL REQUIRED TO COMPENSATE FOR FRAME, DECK, OR FORMWORK DEFLECTIONS TO MAINTAIN SURFACE TOLERANCES SPECIFIED.
11. NON-SHRINK GROUT, 7000 PSI.
12. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES UNO.
13. PROVIDE CONTROL JOINTS IN CONTINUOUS CONCRETE WALLS AT 32 FT OC MAX AND CONSTRUCTION JOINTS AT 96 FT OC MAX.
14. PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLAB-ON-GRADE AS SHOWN IN TYPICAL DETAILS SO AS TO DIVIDE SLABS INTO APPROXIMATELY RECTANGULAR ARES NOT OVER 400 SQUARE FEET WITH A RATIO OF LONG TO SHORT SIDES NOT OVER 1.5 AND SPACING NOT EXCEEDING 20'-0" ON CENTER. IN ADDITION, PROVIDE CONTROL JOINTS OFF OF ALL REENTRANT CORNERS TO INTERSECTION OF CONTROL JOINTS BEYOND. PROVIDE CONTROL JOINTS TO CONNECT OFFSET COLUMNS, PITS AND OTHER INTERRUPTIONS TO THE SLAB.

STRUCTURAL STEEL:

1. STRUCTURAL STEEL, DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" WITH AMENDMENTS, AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," WITH AMENDMENTS.

2. ALL W AND WT SECTIONS SHALL CONFORM TO ASTM A992, GRADE 50. CHANNEL AND ANGLE SHAPES SHALL BE ASTM A36. PLATES SHALL CONFORM TO ASTM A572, GRADE 50.

3. STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B OR ASTM A501. MILL TEST REPORTS FOR STEEL PIPE SHALL BE SUBMITTED FOR APPROVAL.

4. RECTANGULAR STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE C, FY = 50 KSI. ROUND STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE C, FY = 46 KSI.

5. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 Gr 55, UNLESS NOTED OTHERWISE. CONNECTION BOLTS SHALL CONFORM TO ASTM A325, UNLESS NOTED OTHERWISE.

6. WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD D1.1 LATEST EDITION. ELECTRODES FOR SHOP AND FIELD WELDS SHALL CONFORM TO AWS A5.1 OR AWS A5.5, CLASS E70XX. SUBMIT SPECIFICATIONS OF PROPOSED SUBSTITUTE FILLER METAL FOR APPROVAL.

7. HOT DIP GALVANIZE IN ACCORDANCE WITH THE SPECIFICATIONS STRUCTURAL STEEL AND FASTENERS THAT ARE PERMANENTLY EXPOSED TO THE WEATHER UNLESS OTHERWISE NOTED. REPAIR GALVANIZING AFTER WELDING IN ACCORDANCE WITH THE SPECIFICATIONS. COAT NON-EXPOSED ELEMENTS WITH ZINC RICH PRIMER PER THE SPECIFICATIONS.

8. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IS PROHIBITED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPLICE AND CONNECTION TO BE MADE.

9. HEADED CONCRETE ANCHORS SHALL BE NELSON HEADED CONCRETE ANCHORS (OR APPROVED EQUAL), AND SHALL CONFORM TO ASTM A108. ANCHORS SHALL BE AUTOMATICALLY END WELDED WITH SUITABLE STUD WELDING EQUIPMENT IN THE SHOP OR IN THE FIELD. WELDING SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE NELSON STUD WELDING...

10. DEFORMED BAR ANCHORS (DBA) SHALL BE NELSON DEFORMED BAR ANCHORS (OR APPROVED EQUAL), AND SHALL BE MADE FROM LOW CARBON STEEL CONFORMING TO ASTM A496. ANCHORS SHALL BE AUTOMATICALLY END-WELDED WITH SUITABLE WELDING EQUIPMENT IN THE SHOP OR IN THE FIELD. WELDING SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE NELSON...

11. WELDS USED IN MEMBERS AND CONNECTIONS IN THE SEISMIC LOAD RESISTIVE SYSTEM (IE. DRAG-STRUTS, MOMENT FRAMES & BRACE FRAMES) DESIGNATED IN THE DRAWINGS AS DEMAND CRITICAL (DC) WELDS SHALL HAVE A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS PER AISC 341 SECTION 7.3b. OTHER WELDS SHALL COMPLY WITH SECTION 7.3a.

12. THE METAL OF THE BEAMS, COLUMNS AND PLATES USED IN MEMBERS & CONNECTIONS IN THE SEISMIC LOAD RESISTIVE SYSTEM (IE. DRAG-STRUTS, MOMENT FRAMES & BRACE FRAMES) DESIGNATED IN THE DRAWINGS (SLRS) WITH THICKNESS AS DESIGNATED IN AISC 341 SECTION 6.3 SHALL HAVE A CVN TOUGHNESS AS LISTED IN AISC 341 SECTION 6.3

13. SUBMIT A WELDING PROCEDURE IN ACCORDANCE WITH AWS D1.1, 1996 APPROVED PROCEDURES TO BE SUBMITTED TO SPECIAL INSPECTOR FOR REVIEW AND APPROVAL THEN TO THE ENGINEER FOR REVIEW.

14. SEE FRAME ELEVATIONS FOR LOCATION OF PROTECTED ZONES FOR LATERAL RESISTIVE FRAMES. DO NOT CONNECT ANYTHING TO PROTECTED ZONES, PER AISC 341 SECTION 7.4

15. LOWEST ANTICIPATED SERVICE TEMPERATURE (LAST) SHALL BE 50 DEGREES FAHRENHEIT FOR INDOOR CONDITIONED STRUCTURES & 0 DEGREES FAHRENHEIT FOR OUTDOOR/UNCONDITIONED STRUCTURES.

ADHESIVE ANCHORS AND DOWELS:

1. USE ANCHOR SPECIFIED ON DRAWINGS. WHERE NOT SPECIFIED, ANCHORS AND DOWELS INSTALLED INTO CONCRETE SHALL BE POWERS PE1000+ BY POWERS (ICC ESR-2583), HIT-RE 500-SD BY HILTI (ICC ESR-2322), OR SET-XP BY SIMPSON STRONG-TIE (ICC ESR-2508).

2. ANCHORS: ASTM F1554 GR 55 THREADED RODS WITH ASTM A 563 GRADE A NUTS AND ASTM F436 WASHERS, UNLESS OTHERWISE...

3. DOWELS: ASTM A615 GRADE 60 REINFORCING STEEL.

4. REMOVE GREASE, OIL, RUST, AND OTHER LAITANCE FROM RODS AND DOWELS PRIOR TO INSTALLATION.

5. PLACE ADHESIVE WITH THE MANUFACTURER'S RECOMMENDED APPLICATION TOOL TO A DEPTH AS SPECIFIED BY THE MANUFACTURER AND TO MINIMIZE THE AMOUNT OF ADHESIVE THAT WILL OVERFLOW OUT OF THE HOLE WHEN THE BAR IS INSERTED. REMOVE EXCESS ADHESIVE ON THE ADJACENT...

6. INSERT THE ANCHOR OR DOWEL IN THE HOLE WITH A TWISTING MOTION TO THE REQUIRED EMBEDMENT DEPTH. DO NOT PUMP THE ANCHOR OR DOWEL IN AND OUT OF THE HOLE.

7. WEDGE BARS TIGHT AND CENTERED IN THE HOLE WITH WOODEN WEDGES TO HOLD IT IN PLACE UNTIL THE ADHESIVE SETS.

8. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NE...

9. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH ADHESIVE ANCHORS.

STRUCTURAL OBSERVATIONS:

1. IN ACCORDANCE W/IBC CH 17 AND AT THE DIRECTION OF THE ENGINEER OF RECORD THE FOLLOWING ITEMS REQUIRE PERIODIC STRUCTURAL OBSERVATION. NOTIFY ENGINEER OF RECORD AT LEAST 48 HOURS BEFORE A DESIGNATED WORK IS TO BE COVERED.

LOCATION	TYPE
1. FOUNDATION	REINFORCING STEEL
2. METAL DECKING	DECK ATTACHMENT

1

DEFERRED SUBMITTALS:

LOCATION
1. CROSS-OVER STAIR
2. FALL PROTECTION ANCHORS

DESIGN DRAWINGS, SHOP DRAWINGS, AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY OTHERS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON, AND SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO FABRICATION. CALCULATIONS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS INDUCED BY THE CONNECTION LOADS. DESIGN SHALL BE BASED ON THE REQUIREMENTS OF THE CITY OF BELLEVUE BUILDING...

FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON AND SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

TABLE 1

REQUIRED GEOTECHNICAL SPECIAL INSPECTIONS

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD...	FREQUENCY		
			Continu...	Periodic	
SOILS					
GEOTECHNICAL INVESTIGATIONS	1803				GEOTECHNICAL INVESTIGATION SHALL INCLUDE ITEMS OF SPECIAL INSPECTION AND TESTING
VERIFY FOOTING BEARING CAPACITY AND SUBGRADE PREPARATION FOR FILLS	TABLE 1705.6	GEOTECHNICAL REPORT		X (a)	BY THE GEOTECHNICAL ENGINEER
FILL MATERIAL VERIFICATION			X		
FILL PLACEMENT & COMPACTION			X		
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING...	TABLE 1705.6			X (a)	BY THE GEOTECHNICAL ENGINEER
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	TABLE 1705.6			X	
PERFORM CLASSIFICATION OF COMPACTED FILL MATERIALS	TABLE 1705.6 1803.5.1			X	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	TABLE 1705.6		X		BY THE GEOTECHNICAL ENGINEER
1 PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	TABLE 1705.6			X	
INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	TABLE 1705.8		X		
VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	TABLE 1705.8		X		
FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.3.	TABLE 1705.8			X	

TABLE 2

REQUIRED STRUCTURAL SPECIAL INSPECTIONS

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
VERIFICATION OF FRAME JOINT DETAILS INCLUDING MEMBER AND COMPONENT LOCATIONS, BRACING, AND STIFFENERS	TABLE 1705.2			X (a)	
MATERIAL VERIFICATION OF REINFORCING STEEL FOR WELDING	TABLE 1705.2	ACI 318: 3.5.2 AWS D1.4		X	CERTIFIED MILL TEST REPORTS
WELDING REINFORCING EXCEPT AS NOTED OTHERWISE				X	
WELDING REINFORCING STEEL IN SHEAR WALL BOUNDARY ELEMENTS			X		ALL WELDS VISUALLY INSPECTED PER AWS D1.4.7.5
WELDING SHEAR REINFORCEMENT			X		ALL WELDS VISUALLY INSPECTED PER AWS D1.4.7.5

TABLE 2

REQUIRED STRUCTURAL SPECIAL INSPECTIONS

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
FABRICATORS					
FABRICATORS	1704.2.5			X	SPECIAL INSPECTIONS APPLY TO VERIFICATION OF DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES INCLUDING REVIEW FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS
CONCRETE					
INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE	1909.1	ACI 318: 3.8.6, 8.1.3, 21.1.8		X (a)	
REINFORCING STEEL AND PRESTRESSING TENDON PLACEMENT	1705.3 1910.4 1901.3.2	ACI 318: 3.5 ACI 318: 7.1-7.7		X	TOLERANCES AND REINFORCING PLACEMENT PER ACI 7.5; SPACING LIMITS FOR REINFORCING ACI 7.6
WELDING REINFORCING STEEL	1705.2.2.1 1903.1	ACI 318: 3.5.2 AWS D1.4	X		REFER TO STEEL FOR WELDING REQUIREMENTS TABLE 1704.3, ITEM 5b
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706	TABLE 1705.3	AWS D1.4 ACI 318: SECTION 3.5.2		X	
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT		AWS D1.4 ACI 318: SECTION 3.5.2	X (b)		
3) SHEAR REINFORCEMENT		AWS D1.4 ACI 318: SECTION 3.5.2	X		
4) OTHER REINFORCING STEEL.	TABLE 1705.3	AWS D1.4 ACI 318: SECTION 3.5.2		X	
PLACEMENT OF BOLTS INSTALLED IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED	TABLE 1705.3 1908.5 1909.1	ACI 318: 1.3.2.C ACI 318: 8.1.3 ACI 318: 21.1.8	X		ALL BOLTS VISUALLY INSPECTED
VERIFYING USE OF REQUIRED MIX DESIGN(S)	TABLE 1705.3 1904 1910.2-3 1901.2.1	ACI 318: CHAPTER 4 ACI 318: 5.2-5.4		X	
CONCRETE PLACEMENT	TABLE 1705.3	ACI 318: 1.3.2.D ACI 318: 5.9 - 5.10	X		
SHOTCRETE PLACEMENT	TABLE 1705.3 1910.6-8		X		
CONCRETE PLACEMENT AT COMPOSITE SLABS	TABLE 1705.3	ASCE 9, CHAPTER 3	X		
CONCRETE/SHOTCRETE CURING	TABLE 1705.3 1910.9	ACI 318: 1.3.2.D ACI 318: 5.11-5.13		X (a)	
ERECTION OF PRECAST MEMBERS	TABLE 1705.3	ACI 318: CHAPTER 16		X (a)	ALL CONNECTIONS VISUALLY INSPECTED REFER TO ANCHOR BOLT WELDING REQUIREMENTS AND STRUCTURAL INTEGRITY PROVISIONS
VERIFICATION OF IN-SITU CONCRETE PRIOR TO REMOVAL OF FORMS AND SHORES FROM STRUCTURAL SLABS	TABLE 1705.3	ACI 318: 6.2		X (a)	
VERIFICATION OF FORMWORK	TABLE 1705.3	ACI 318: 6.1.1		X (a)	SPECIAL INSPECTIONS APPLY TO SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED

TABLE 2

REQUIRED STRUCTURAL SPECIAL INSPECTIONS

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
STEEL					
FABRICATION OF STRUCTURAL ELEMENTS	1704.2.5			X	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS
MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD FORMED STEEL DECK	1705.2 2203.1	ASTM A6 ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS AISC 360 A3.1 AISC 360 M5.5		X	CERTIFIED MILL TEST REPORTS
MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS, NUTS, AND WASHERS	1705.2.1.1	ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS RCSC 2.1		X	MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF ANCHOR BOLTS AND THREADED RODS	1705.2	AISC 360 A3.4 ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS		X	MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF WELD FILLER METALS	1705.2.2.1	AISC 360 A3.5 APPLICABLE AWS A5 DOCUMENTS		X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S				X	COPY OF WELDING PROCEDURE SPECIFICATIONS
VERIFYING WELDER QUALIFICATIONS				X	COPY OF QUALIFICATION CARDS
COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS	1705.2.2.1	AWS D1.1 SECTION 6	X		ALL WELDS VISUALLY INSPECTED PER AWS D1.1 6.9
MULTIPASS FILLET WELDS	1705.2.2.1 TABLE 1705.2	AWS D1.1, SECTION 6	X		
SINGLE PASS FILLET WELDS GREATER THAN 5/16"			X		
PLUG AND SLOT WELDS			X		
SINGLE PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16"				X	
INSTALLATION OF COMPOSITE SLAB DECKING	TABLE 1705.2 1705.1.1	ICC EVALUATION REPORT ASCE 9 CHAPTER 3		X	SPECIAL INSPECTIONS APPLY TO DECKING TYPE, DEPTH, GAGE, AND FASTENING
INSTALLATION OF ROOF DECKING	TABLE 1705.2	ICC EVALUATION REPORT		X	SPECIAL INSPECTIONS APPLY TO DECKING TYPE, DEPTH AND GAGE, POWER ACTUATED FASTENERS, SCREWS, PROPRIETARY SIDE SEAM ATTACHMENTS, BUTTON PUNCHES AND SHEAR CONNECTORS
FLOOR AND ROOF DECK WELDS	TABLE 1705.2	AWS D1.3 SECTION 7		X	ALL WELDS INSPECTED PER AWS D1.3 7.1
WELDING STUDS EXCEPT AS NOTED OTHERWISE		AWS D1.1 SECTION 7	X		ALL WELDS VISUALLY INSPECTED PER AWS D1.1 7.8.1
WELDING STUDS IN STRUCTURAL DIAPHRAGMS				X	
WELDING STAIR AND RAILING SYSTEMS		AWS D1.1 SECTION 6		X	ALL WELDS VISUALLY INSPECTED PER AWS D1.1 6.9
SNUG-TIGHT HIGH STRENGTH BOLT INSTALLATION	TABLE 1705.2	RCSC SPECIFICATION...		X	ALL CONNECTIONS INSPECTED AND VERIFIED SNUG

D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt

3/4/2022 10:34:56 AM

PROJECT ARCHITECT:				
DRAWN BY: LMY				
REVIEWED BY: LMY				
REVIEWED BY: MISC				
	11/19/2021	REVISION 1: UPDATED FOR PERMIT	LMY	11/19/2021
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021
	DATE	REVISION	BY	DATE

REGION NO. 10 STATE: WASH

FEDERAL AID PROJECT NO.

UB PERMIT HEDG00000025

FCR NO:

DESIGN NO:

CONTRACT NO:

ALLISON M. WYATT
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Washington State
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BID SET

CITY OF BELLEVUE, WA

SPECIAL INSPECTION

S003

SHEET

OF

SHEETS

1

TABLE 2

REQUIRED STRUCTURAL SPECIAL INSPECTIONS

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
COLD-FORMED STEEL FRAMING					
MATERIAL VERIFICATION OF WELD FILLER METALS	1705.2	AWS D1.3 SECTION 7		X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S				X	COPY OF WELDING PROCEDURE SPECIFICATIONS
COLD-FORMED STEEL ROOF AND FLOOR DECKS	1705.2	AWS D1.3		X	WELDING INSPECTION AND INSPECTOR QUALIFICATION
VERIFYING WELDER QUALIFICATIONS	1705.2			X	COPY OF QUALIFICATION CARDS
WELDED FRAMING CONNECTIONS		AWS D1.3 SECTION 7		X	ALL WELDS VISUALLY INSPECTED PER AWS D1.3 7.1
POST INSTALLED CONCRETE ANCHORS					
INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE	TABLE 1705.3 1909.1	ICC EVALUATION REPORT ACI 318: 3.8.6, 8.1.3, 21.1.8		X	SPECIAL INSPECTIONS APPLY TO ANCHOR PRODUCT NAME, TYPE, AND DIMENSIONS, HOLE DIMENSIONS, COMPLIANCE WITH DRILL BIT REQUIREMENTS, CLEANLINESS OF THE HOLE AND ANCHOR, ADHESIVE EXPIRATION DATE, ANCHOR/ADHESIVE INSTALLATION, ANCHOR EMBEDMENT, AND TIGHTENING TORQUE

TABLE 5

REQUIRED TESTING for SPECIAL INSPECTIONS

SYSTEM or MATERIAL	TESTING				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
GEOTECHNICAL					
GEOTECHNICAL ENGINEER TO PERFORM TESTING OF COMPACTED...	1803				TESTING PER GEOTECHNICAL REPORT
FILL IN-PLACE DENSITY OR PREPARED SUBGRADE DENSITY	1705.6	VARIES; MINIMUM PER IBC APPENDIX J107.5		X (a)	BY THE GEOTECHNICAL ENGINEER
MATERIAL VERIFICATION		VARIES; CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		X (a)	BY THE GEOTECHNICAL ENGINEER
CONCRETE					
AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	TABLE 1705.3	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	X		FABRICATE SPECIMENS AT TIME FRESH CONCRETE IS PLACED ONCE EACH DAY FOR A GIVEN CLASS OF CONCRETE, OR LESS THAN ONCE FOR EACH 150 YDS OF CONCRETE, OR LESS THAN ONCE FOR EACH 5,000 FT2 OF SURFACE AREA FOR SLABS/WALLS. ONCE EACH SHIFT FROM IN-PLACE WORK OR FROM TEST PANEL AND MINIMUM ONE SPECIMEN FOR EACH 50 CUBIC YARDS. "PRECONSTRUCTION TESTS AS REQUIRED PER THE BUILDING OFFICIAL."
CONCRETE STRENGTH	TABLE 1705.3 1903 1904	ASTM C39	X		
CONCRETE SLUMP		ASTM C143	X		
CONCRETE AIR CONTENT		ASTM C231	X		
CONCRETE TEMPERATURE		ASTM C1064	X		
SHOTCRETE STRENGTH	1705.3 1910.10	ASTM C39	X		IBC 1913.10.1: SPECIMENS SHALL BE TAKEN FROM THE IN-PLACE OR FROM TEST PANELS, AND SHALL BE TAKEN AT LEAST ONCE EACH SHIFT, BUT NOT LESS THAN ONE FOR EACH 50 CUBIC YARDS OF SHOTCRETE

TABLE 5

REQUIRED TESTING for SPECIAL INSPECTIONS

SYSTEM or MATERIAL	TESTING				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continuous	Periodic	
STEEL					
MAGNETIC PARTICLE (MT) AND ULTRASONIC (UT) TESTING OF WELDS	1705.2.1	MT - AWS D1.1 6.14.4 UT - AWS D1.1 6.13 & 6.14.3	PER DRAWINGS		
PRE-CONSTRUCTION TESTING OF WELDING STUDS	1705.2	AWS D1.1 7.7.1	EACH SIZE AND TYPE OF STUD EACH SHIFT		
PRE-INSTALLATION TESTING OF WELDING STUDS WELDED THROUGH DECKING	1705.2	AWS D1.1 7.6	EACH STUD SIZE AND DECK GAGE COMBINATION		
PRE-INSTALLATION VERIFICATION OF PRETENSIONED HIGH STRENGTH BOLTS	1705.2.1.1	RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR...	EACH COMBINATION OF DIAMETER, LENGTH, GRADE, AND LOT TO BE USED IN THE WORK		

TABLE 6

REQUIRED SPECIAL INSPECTIONS for SEISMIC RESISTANCE

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERE...	CODE or STANDARD...	FREQUENCY		
			Continu...	Periodic	
STEEL					
WELDING OF THE SEISMIC FORCE-RESISTING SYSTEM	1705.11.1	AISC 341 Q5.1 AWS D1.1 SECTION 6			REFER TO TABLE 2 OF GUIDELINES FOR FABRICATOR AND WELDING SPECIAL INSPECTION REQUIREMENTS. ENGINEER OF RECORD TO CLEARLY INDICATE THE SCOPE OF INSPECTIONS ON DRAWINGS. IBC 1707.2 AND 1708.3 REQUIRE SPECIAL INSPECTIONS AND RELATED TESTING FOR STRUCTURAL STEEL FOR THE SEISMIC FORCE RESISTING SYSTEM TO COMPLY WITH THE QUALITY ASSURANCE PLAN REQUIREMENTS OF AISC 341. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SPECIFIES THE QA PLAN WHICH SHOULD BE PROVIDED TO THE CONTRACTOR AS PART OF THE BID DOCUMENTS AND SHOULD BE CLEARLY IDENTIFIED AS SUCH. AISC RECOMMENDS THAT AISC 341 APPENDIX Q, "QUALITY ASSURANCE PLAN", BE ADOPTED. AISC 341 INCLUDES COMMENTARY WHICH WILL BE HELPFUL TO ENGINEERS SPECIFYING PROJECT QA PLANS.
COLD-FORMED STEEL FRAMING					
WELDING OF THE SEISMIC-FORCE-RESISTING SYSTEM	1705.11.3	AWS D1.3 SECTION 7		X	ALL WELDS VISUALLY INSPECTED PER AWS D1.3 7.1
CONNECTIONS FOR DIAPHRAGM ATTACHMENT, DIAPHRAGM CHORDS, COLLECTORS AND BRACING, AND SHEAR WALL FASTENING, ANCHORAGE AND HOLDOWNS				X	ALL CONNECTIONS VISUALLY INSPECTED
ARCHITECTURAL					
INSTALLATION AND ANCHORAGE OF SUSPENDED CEILING SYSTEMS	1705.11.8	ASCE 7-05 Section 13.5.6		X (a)	
INSTALLATION OF OTHER SEISMIC SUPPORTS FOR DESIGNATED ARCHITECTURAL SYSTEMS AND THEI...	1705.11.5			X (a)	

TABLE 7

REQUIRED TESTING for SEISMIC RESISTANCE SPECIAL INSPECTIONS

SYSTEM or MATERIAL	TESTING				REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY		
			Continu...	Periodic	
CONCRETE REINFORCEMENT					
TEST A615 REINFORCEMENT USED TO RESIST EARTHQUAKE INDUCED LOAD IN SPECIAL MOMENT FRAMES, SPECIAL STRUCTURAL WALLS, AND END COUPLING BEAMS CONNECTING STRUCTURAL WALLS IN STRUCTURE ASSIGNED TO SEISMIC DESIGN CATEGORY B, C, D, E AND F	1705.12.1	ACI 318: 21.1.5.2	X (b)	X (a)	NOT REQUIRED WHEN CERTIFIED MILL TEST REPORTS ARE PROVIDED
TEST A615 REINFORCEMENT FOR WELDABILITY WHEN SUCH REINFORCEMENT IS TO BE WELDED	1705.12.1	ACI 318: 3.5.2		X (a)	
STEEL					
UT OF BASE METAL THICKER THAN 1-1/2" SUBJECT TO THROUGH-THICKNESS WELD SHRINKAGE STRAINS	1705.12.2	AISC 341 Q5.2 AWS D1.1 6.13 & 6.14.3	BEHIND AND ADJACENT TO EACH WELD		IBC 1707.2 AND 1708.3 REQUIRE SPECIAL INSPECTIONS AND RELATED TESTING FOR STRUCTURAL STEEL FOR THE SEISMIC FORCE RESISTING SYSTEM TO COMPLY WITH THE QUALITY ASSURANCE PLAN REQUIREMENTS OF AISC 341. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SPECIFIES THE QA PLAN WHICH SHOULD BE PROVIDED TO THE CONTRACTOR AS PART OF THE BID DOCUMENTS AND SHOULD BE CLEARLY IDENTIFIED AS SUCH. AISC RECOMMENDS THAT AISC 341 APPENDIX Q, "QUALITY ASSURANCE PLAN", BE ADOPTED. AISC 341INCLUDES COMMENTARY WHICH WILL BE HELPFUL TO ENGINEERS SPECIFYING PROECT QA PLANS.
MT OF K-AREA OF ROLLED WIDE FLANGE COLUMN WEBS ADJACENT TO DOUBLER/CONTINUITY PLATE WELDS	1705.12.2	AISC 341 Q5.2 AWS D1.1 6.14.4	EACH PLATE LOCATION		
MAGNETIC PARTICLE (MT) AND ULTRASONIC (UT) TESTING OF COMPLETE JOINT PENETRATION GROOVE (CJP) WELDS IN MATERIALS 5/16" THICK AND GREATER	1705.12.2	AISC 341 Q5.2 MT - AWS D1.1 6.14.4 UT - AWS D1.1 6.13 & 6.14.3	UT 100% OF WELDS MT 25% OF WELDS REFER TO DRAWINGS FOR LOCATIONS		
MT OF THERMALLY CUT SURFACES OF BEAM COPES AND ACCESS HOLES AT WELDED SPLICES AND CONNECTIONS WHEN THE FLANGE THICKNESS EXCEEDS 1 1/2" FOR ROLLED SHAPES OR THE WEB THICKNESS EXCEEDS 1 1/2" FOR BUILT-UP SHAPES	1705.12.2	AISC 341 Q5.2 AWS D1.1 6.14.4	EACH LOCATION		
MT OF THE WELD AND ADJACENT AREA IN A REDUCED BEAM SECTION (RBS) PLASTIC HINGE REGION REPAIRED BY WELDING	1705.12.2	AISC 341 Q5.2 AWS D1.1 6.14.4	EACH LOCATION		
MT OF THE ENDS OF FLANGE WELDS FROM WHICH WELD TABS HAVE BEEN REMOVED	1705.12.2	AISC 341 Q5.2 AWS D1.1 6.14.4	EACH LOCATION		

TABLE 8

REQUIRED SPECIAL INSPECTIONS for WIND RESISTANCE

SYSTEM or MATERIAL	INSPECTION				REMARKS
	IBC CODE REFERE...	CODE or STANDARD...	FREQUENCY		
			Continu...	Periodic	
ROOF CLADDING AND ROOF FRAMING CONNECTIONS	1705.10			X (a)	REFER TO TABLE 2: REQUIRED STRUCTURAL SPECIAL INSPECTIONS
WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING	1705.10			X (a)	
ROOF AND FLOOR DIAPHRAGM SYSTEMS, INCLUDING COLLECTORS, DRAG STRUTS AND BOUNDARY ELEMENTS	1705.10			X (a)	
VERTICAL WIND-FORCE-RESISTING SYSTEMS, INCLUDING BRACED FRAMES, MOMENT FRAMES AND SHEAR WALLS	1705.10			X (a)	
CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING FIELD GLUING OPERATIONS OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE MAIN WINDFORCE-RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLD-DOWNS	1705.10.1			X (a)	

	DATE	REVISION	BY	DATE
PROJECT ARCHITECT:				
DRAWN BY: LMY				
REVIEWED BY: LMY				
REVIEWED BY: MISC				
	11/19/2021	REVISION 1: UPDATED FOR PERMIT	LMY	11/19/2021
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021

REGION NO. 10 STATE: WASH
FEDERAL AID PROJECT NO.
UB PERMIT HEDG00000025
FCR NO:
DESIGN NO:
CONTRACT NO:

ALISON M. WYATT
STATE OF WASHINGTON
51513
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NORTHUP PREWASH RETROFIT NPDES - NWR

BID SET

CITY OF BELLEVUE, WA

SPECIAL INSPECTION

S004

SHEET OF SHEETS

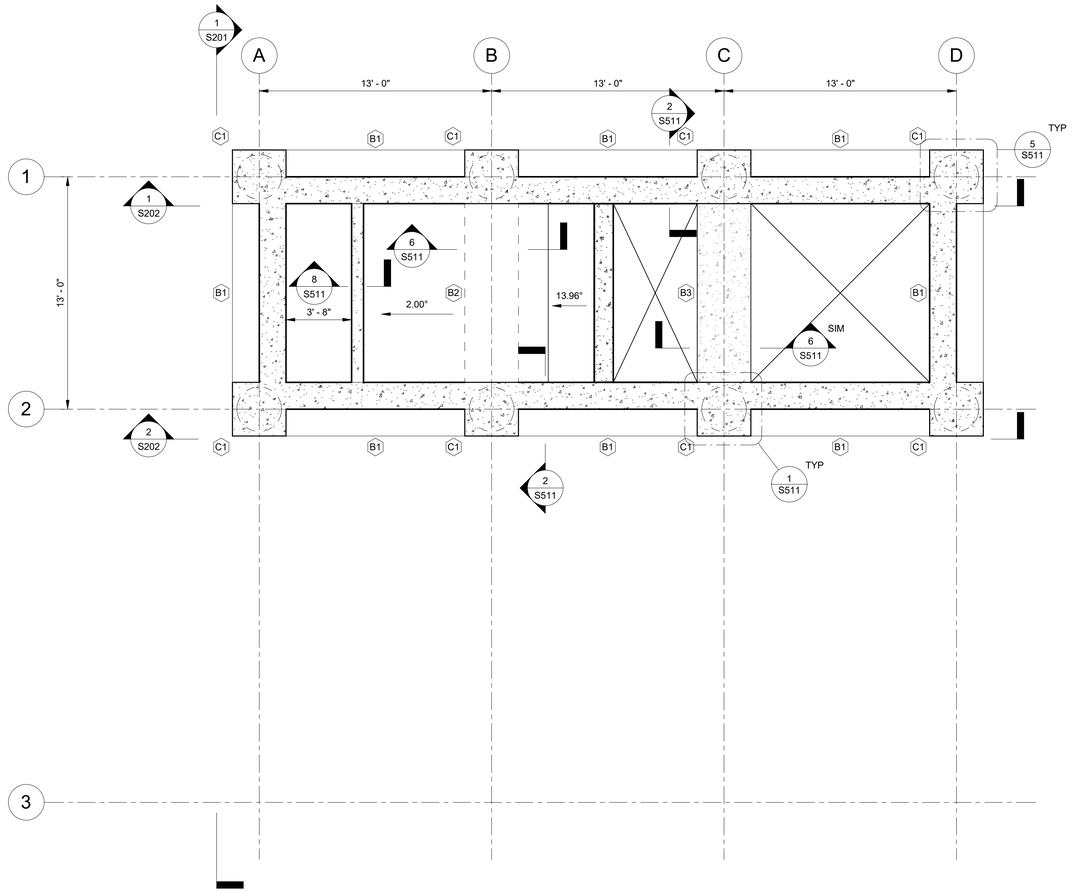
D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt

3/4/2022 10:34:57 AM

CONCRETE COLUMN SCHEDULE					
	DIMENSIONS		STEEL REINFORCING		
MARK	WIDTH	LENGTH	LONGITUDINAL	TRANSVERSE	REMARKS
C1	3'-0"	3'-0"	(12) - #10	#3 @ 18"	SEE DETAIL 1/S511 OR 5/S511

GRADE BEAM SCHEDULE						
	DIMENSIONS			STEEL REINFORCING		
MARK	WIDTH	DEPTH	NOTES	LONGITUDINAL	TRANSVERSE	REMARKS
B1	3'-0"	2'-0"	-	(5) - #7	#4 @ 12"	TOP AND BOTTOM
B2	3'-0"	2'-3"	INTEGRAL WITH SLAB	(5) - #7	#4 @ 12"	TOP AND BOTTOM
B3	3'-0"	4'-9"	INTERGRAL WITH SLAB	(5) - #7	#4 @ 12"	TOP AND BOTTOM

FOUNDATION PLAN NOTES	
A	SEE GENERAL NOTES FOR REINFORCEMENT LAP SPLICE LENGTH
B	VERIFY ALL GRID/COLUMN LOCATIONS/DIMENSIONS WITH ARCH
C	SEE TYPICAL CONCRETE DETAILS ON SHEETS S500, S501, S502, AND S511



FOUNDATION PLAN
1/4" = 1'-0"

1
S101

PROJECT ARCHITECT:					REGION NO: 10	STATE: WASH	
DRAWN BY: LMY					FEDERAL AID PROJECT NO:		
REVIEWED BY: LMY					**UB PERMIT HEDG00000025**		
REVIEWED BY: MISC							
					FCR NO:		
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021	DESIGN NO:		
	DATE	REVISION	BY	DATE	CONTRACT NO:		

ALISON M. WYATT — STATE OF WASHINGTON — 61513 — REGISTERED PROFESSIONAL ENGINEER

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FOUNDATION PLAN

S101

SHEET

OF

SHEETS

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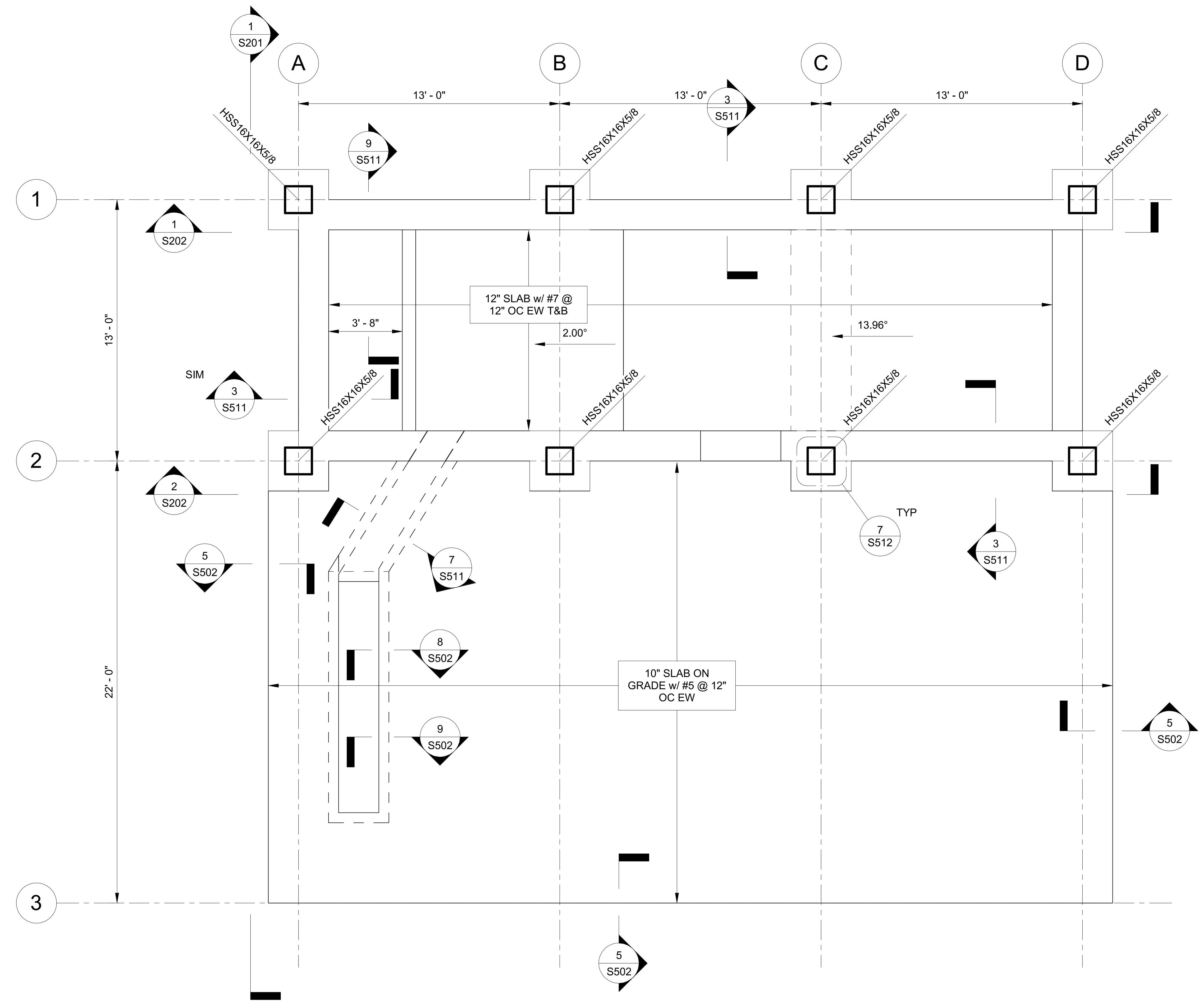

FIRST FLOOR PLAN
1/4" = 1'-0"

1
S102

3/4/2022 10:34:58 AM D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt

PROJECT ARCHITECT:
DRAWN BY: LMY
REVIEWED BY: LMY
REVIEWED BY: MISC
AS BUILT BY:

DATE	REVISION	BY	DATE
8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021

REGION NO. 10 STATE: WASH
FEDERAL AID PROJECT NO.
UB PERMIT HEDG00000025
FCR NO:
DESIGN NO:
CONTRACT NO:

ALISON M. WYATT STATE OF WASHINGTON 51513 REGISTERED PROFESSIONAL ENGINEER

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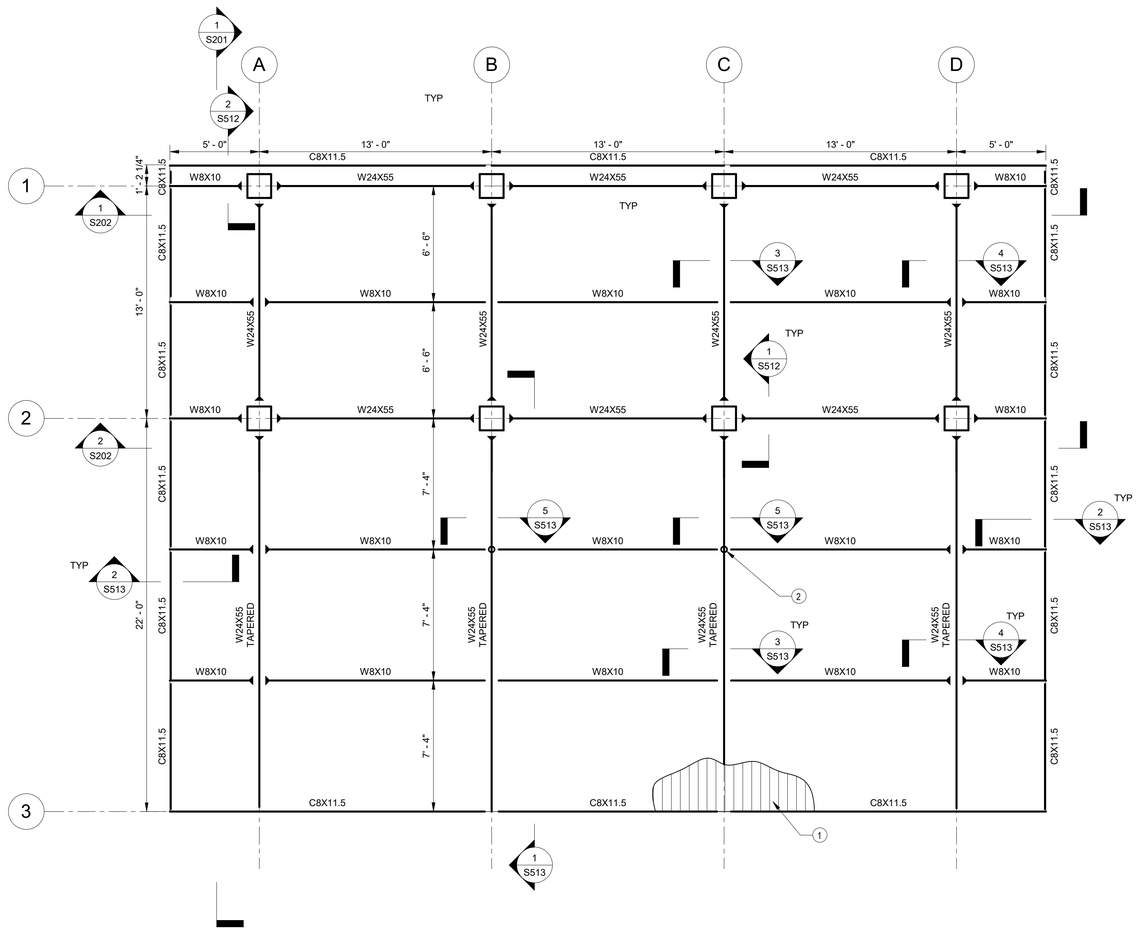
1ST FLOOR PLAN

S102
SHEET
OF
SHEETS

LEGEND

▶ MOMENT CONNECTION

CONSTRUCTION NOTES	
1	1 1/2" 20 GA VERCO PLB-36 ROOF DECK w/ (4) 1/2" DIA SPOT WELDS @ EA PERP SUPPORT AND SIDE LAP CONNECTION (VSC) @ 12" OC
2	FALL PROTECTION ANCHOR LOCATION, ATTACH PER MANUFACTURERS INSTRUCTIONS



ROOF FRAMING PLAN
1/4" = 1'-0"

1 S103

PROJECT ARCHITECT:					REGION NO. 10	STATE: WASH	
DRAWN BY: LMY					FEDERAL AID PROJECT NO.		
REVIEWED BY: LMY					**UB PERMIT HEDG00000025**		
REVIEWED BY: MISC							
					FCR NO:		
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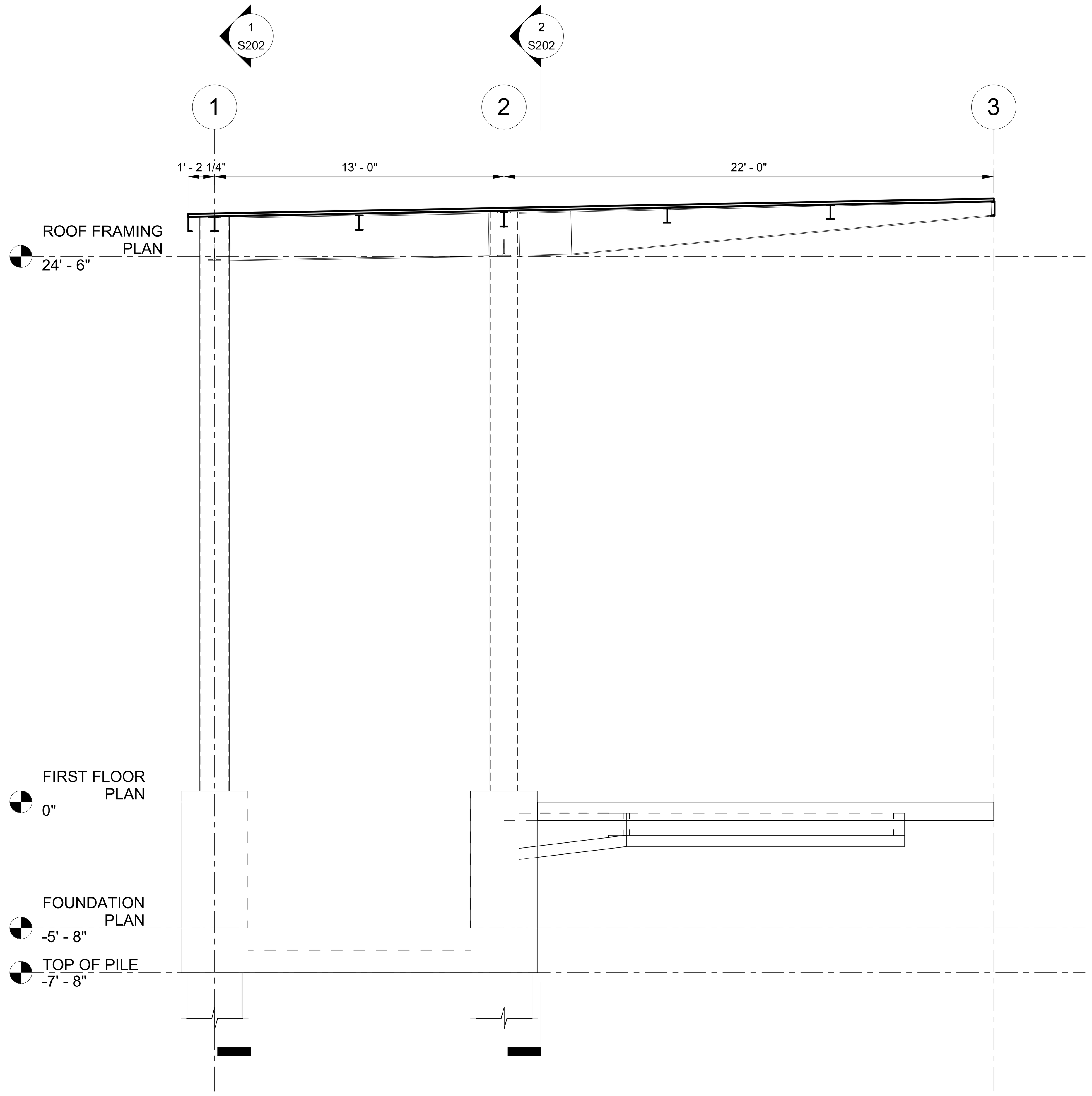
CITY OF BELLEVUE, WA

ROOF FRAMING PLAN

S103

SHEET OF SHEETS

3/4/2022 10:34:59 AM D:_Revit\Northrup Wash Canopy - RvtSD_lmy\QBPWM.rvt



END SECTION

1/4" = 1'-0"

1
S201

D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt

3/4/2022 10:34:59 AM

PROJECT ARCHITECT:				
DRAWN BY: LMY				
REVIEWED BY: LMY				
REVIEWED BY: MISC				
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021
	DATE	REVISION	BY	DATE

REGION NO. 10 STATE: WASH

FEDERAL AID PROJECT NO.

UB PERMIT
HEDG00000025

FCR NO:

DESIGN NO:

CONTRACT NO:

ALISON M. WYATT STATE OF WASHINGTON 51513 REGISTERED PROFESSIONAL ENGINEER

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NORTHUP PREWASH RETROFIT NPDES - NWR

BID SET

CITY OF BELLEVUE, WA

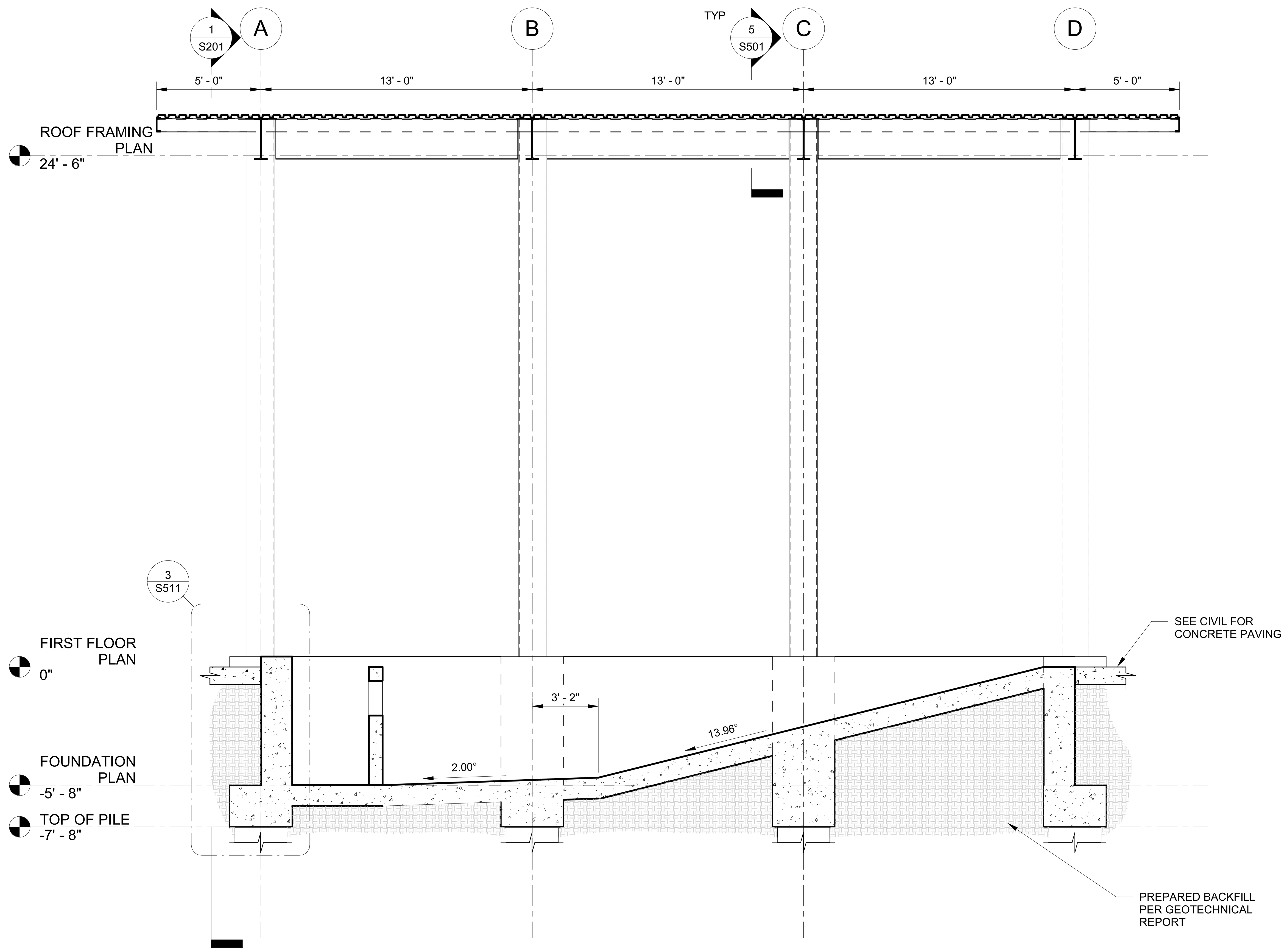
TRANSVERSE SECTIONS

S201

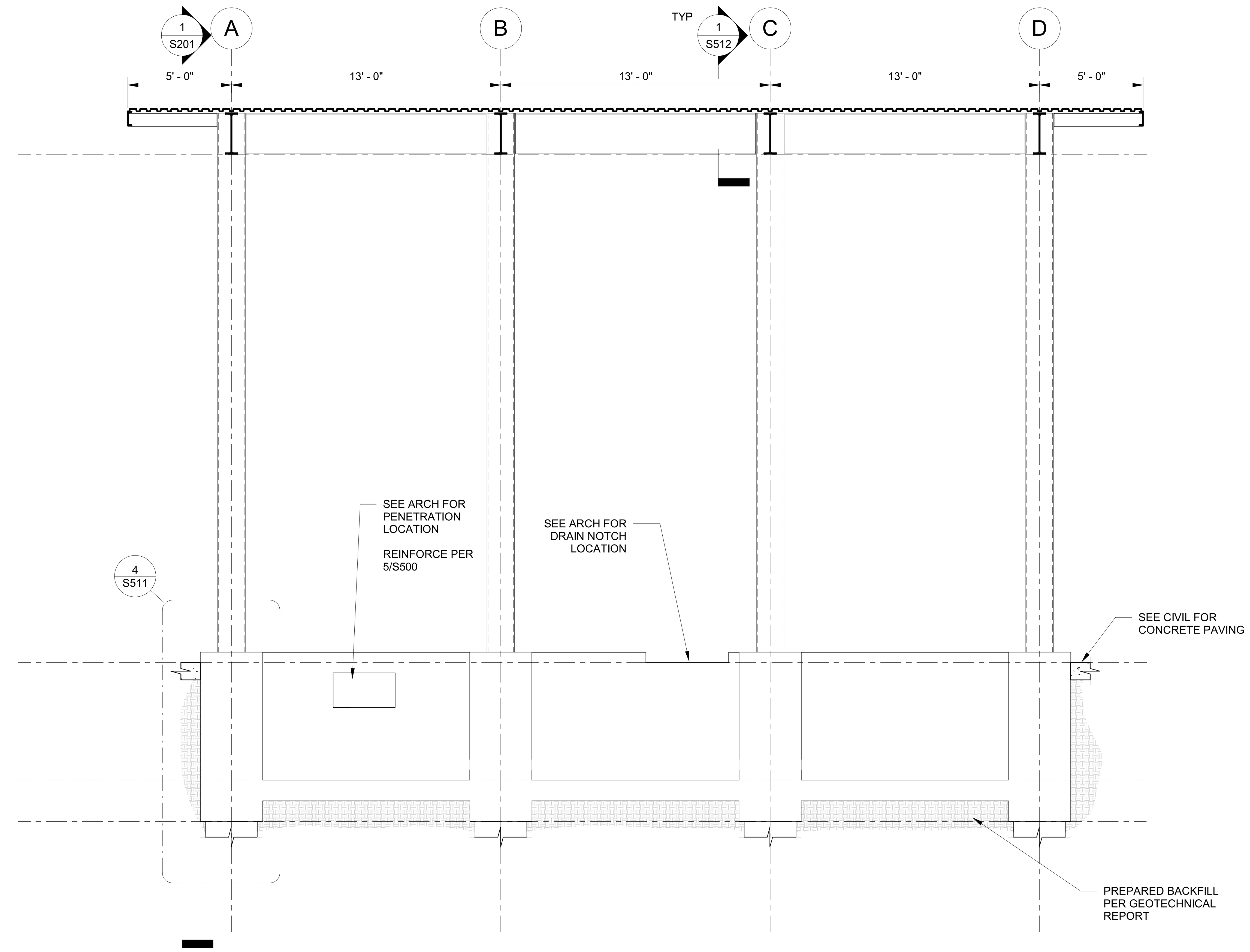
SHEET

OF

SHEETS



SECTION AT GRID 1
1/4" = 1'-0"
1
S202



SECTION AT GRIDLINE 2
1/4" = 1'-0"
2
S202

3/4/2022 10:34:59 AM D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt

PROJECT ARCHITECT:				
DRAWN BY: LMY				
REVIEWED BY: LMY				
REVIEWED BY: MISC				
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021
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REGION NO. 10 STATE: WASH
FEDERAL AID PROJECT NO.
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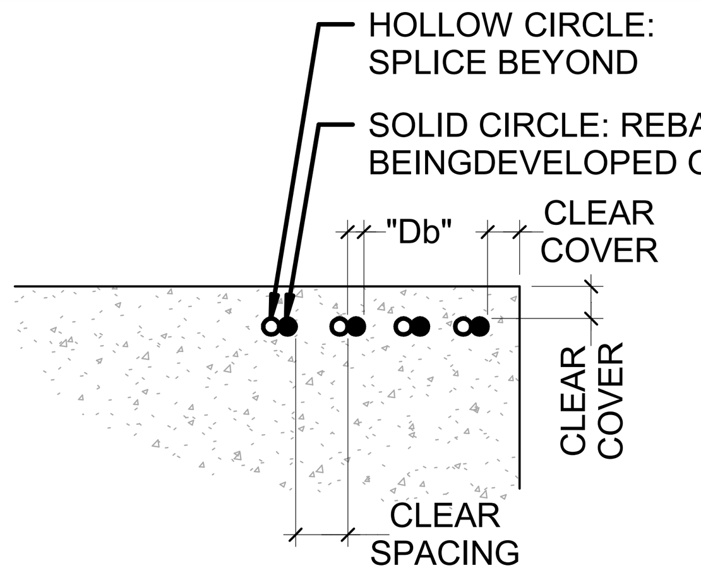
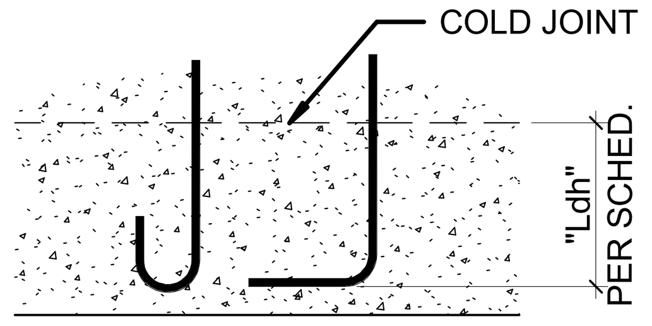
CITY OF BELLEVUE, WA

LONGITUDINAL SECTIONS

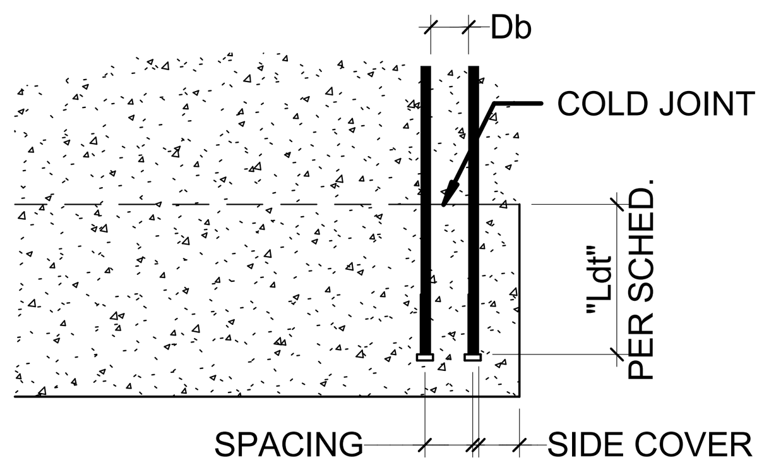
S202
SHEET
OF
SHEETS



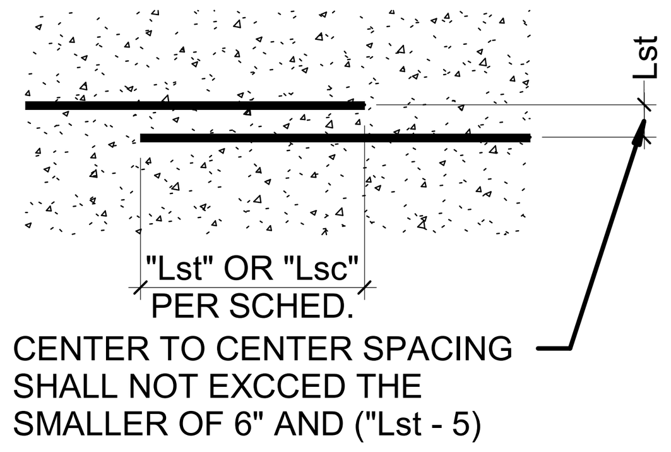
CLEAR COVER & CLEAR SPACING



DEVELOPMENT OF STANDARD HOOK "Ldh"



DEVELOPMENT OF HEADED BAR "Ldt"



TENSION & COMPR. LAP SPLICE "Lst" & "Lsc"

"Db" (IN)	f'c NORMAL WEIGHT (PSI)		STANDARD OF LONGITUDIAL REBAR (IN) SEE MODIFICATION FACTOR PER NOTE 2: TENSION DEVEL. LENGTH "Ld" 3,000	4,000	5,000	6,000	DEVEL. LENGTH "Ldh" STD HOOOK 3,000	4,000	5,000	6,000	DEVEL. LENGTH "Ldt" HEADED BARS 3,000	4,000	5,000	6,000	COMPRESSION DEVEL. LENGTH "Ldc" 3,000	4,000	5,000	6,000	LAP SPLICE OF LONGITUDINAL REBAR (IN) SEE MODIFICATION FACTORS PER NOTE 2: TENSION LAP SPLICE "Lst" CLASS A	CLASS B 3,000	4,000	5,000	6,000	COMPRESSION LAP SPLICE "Lsc" REBAR GRADE KSI LESS THAN... 60	75	80	3,000 AND HIGHER 60	75	80
0.375	REBAR	#3	17	15	13	12	8	7	6	6	7	6	6	6	8	8	8	8	CLASS "A" LAP SPLICE LENGTHS SHALL BE SAME AS "Ld" U.N.O ALL LAP SPLICES SHALL BE CLASS "B"	22	19	17	16	16			12		
0.500		#4	22	19	17	16	11	9	8	8	9	8	7	7	11	10	9	9		29	25	23	21	20			15		
0.625		#5	28	24	22	20	14	12	11	10	11	10	9	8	14	12	12	12		36	31	28	26	25			19		
0.750		#6	33	29	26	24	16	14	13	12	14	12	11	10	17	15	14	14		43	37	34	31	30			23		
0.875		#7	48	42	38	34	19	17	15	14	16	14	12	11	20	17	16	16		63	54	49	45	35			27		
1.000		#8	55	48	43	39	22	19	15	14	18	16	14	13	22	19	18	18		72	62	56	51	39			30		
1.128		#9	62	54	48	44	25	21	19	17	20	18	16	14	25	22	21	21		81	70	63	57	44			34		
1.270		#10	70	61	54	50	28	24	22	20	23	20	18	16	28	25	23	23		91	79	71	64	50			39		
1.410		#11	78	67	60	55	31	27	24	22	25	22	20	18	31	27	26	26		101	87	78	71	55			43		
1.693		#14	93	81	72	66	37	32	29	26	NOT ALLOWED				38	33	31	31	LAP SPLICE NOT ALLOWED SEE NOTE										
2.257		#18	124	108	96	88	49	43	38	35					50	43	41	41											

NOTE:
1. REBAR SHALL BE DEVELOPED ACROSS COLD JOINTS. SPLICES SHALL OCCUR WHERE SHOWN ON DETAIL ONLY.
   UNLESS OTHERWISE NOTED ELSEWHERE IN THE DRAWING SET, THE FOLLOWING SHALL APPLY:
   A. MIN DEVELOPMENT LENGTH ACROSS A COLD JOINT OF STRAIGHT REBAR SHALL BE "Ld"
   B. MIN DEVELOPMENT LENGTH ACROSS A COLD JOINT OF HOOKED REBAR SHALL BE "Ldh"
   C. LAP SLICE SHALL BE CLASS B TENSION LAP SPLICE "Lst"

2. ALL THE DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE MODIFIED AS FOLLOWS:
   A. CASTING POSITION; IF MORE THAN 12 IN. OF FRESH CONCRETE IN PLACED BELOW HORIZONTAL TOP REBAR, SCHEDULED VALUES OF "Ld" AND "Lst" SHALL BE MULTIPLIED BY 1.3.
   B. LIGHT WEIGHT CONCRETE; IF LIGHT WEIGHT CONCRETE IS USED, ALL THE DEVELOPMENT LENGTHS AND TENSION LAP SPICE SCHEDULED VALUES SHALL BE MULTIPLIED BY 1.33. HEADED BARS ARE NOT ALLOWED IN LIGHT WEIGHT CONCRETE. CONPRESSION LAP SPLICE "Lsc" DOES NOT NEED TO BE INCREASED
   C. GRADE OF STEEL; EXECPT "Lsc" SCHEDULED LENGTHS APPLY TO REBAR WITH GRADE 60 KSI. WHERE REBAR WITH HIGHER STRENGTH IS SPECIFIED, OR APPROVED AS A SUBSTITUTION, THE SPLICE PER TABLE ABOVE SHALL BE INCREASED PROPORTIONALLY TO THE HIGHER STRENGTH. FOR GRADE 80, THE LENGTHS SHALL BE MULTIPLIED BY 80/60 = 1.33. HEADED BARS WITH GRADE GREATER THAN 60 KSI SHALL BE PERMITTED.
   D. EPOXY COATING; SCHEDULE LENGTHS APPLY TO UNCOATED OR ZINC COATED (GALVANIZED) REBAR. IF EPOXY COATING IS SPECIFIED, SHEDULE VALUED SHALL BE MULTIPLIED BY 1.2 FOR "Ldh", "Ldt" AND BY 1.5 FOR "Ld", "Lst". VALUES FOR "Ldc" AND "Lsc" DO TO NEED TO BE INCREASED.
   E. CONFINEMENT; SCHEDULED VALUED OF "Ld" AND "Lst" SHALL BE MULTIPLIED BY 1.5 FOR;
      - MEMBERS WITH TIES (SUCH AS COLUMNS, PIPES, BEAMS, ETC.) WITH LONGITUDINAL REBAR WITH "CLEAR COVER" LESS THEN "Db" OR WITH CLEAR SPACING LESS THAN "Db"
      - MEMBERS WITHOUT TIES (SUCH AS WALLS, SLAB, FOOTINGS, ETC.) WITH LONGITUDINAL REBAR WITH CLEAR SPACING LESS THAN 2x"Db"

3. HEADED DEFORMED BARS SHALL BE PERMITTED IF ALL FOLLOWING CONDITIONS ARE MET (SEE INSET DETAILS);\
   - PROVIDE HRC555 HEADED DEFORMED BAR (RESEARCH REPORT ER 177) OR APPROVED EQUIVALENT
   - SIDE COVER IS AT LEAST (2) x Db
   - REBAR SPACING IS AT LEAST (4) x Db

4. WHERE REBAR OF DEFFERENT SIZES ARE LAP SPLICED, THE FOLLOWING SHALL APPLY;
   A. LAP SLPICE SHALL BE THE GREATER OF "Ld" OF LARGER BAR AND "Lst" OF SMALLER BAR (TENSION)
   B. LAP SLPICE SHALL BE THE GREATER OF "Ldc" OF LARGER BAR AND "Lsc" OF SMALLER BAR (COMPRESSION)
   C. TENSION SHALL BE ASSUMED UNLESS NOTED OTHERWISE

5. FOR LAPPING OF BUNDLED REBAR CONTACT E.O.R.

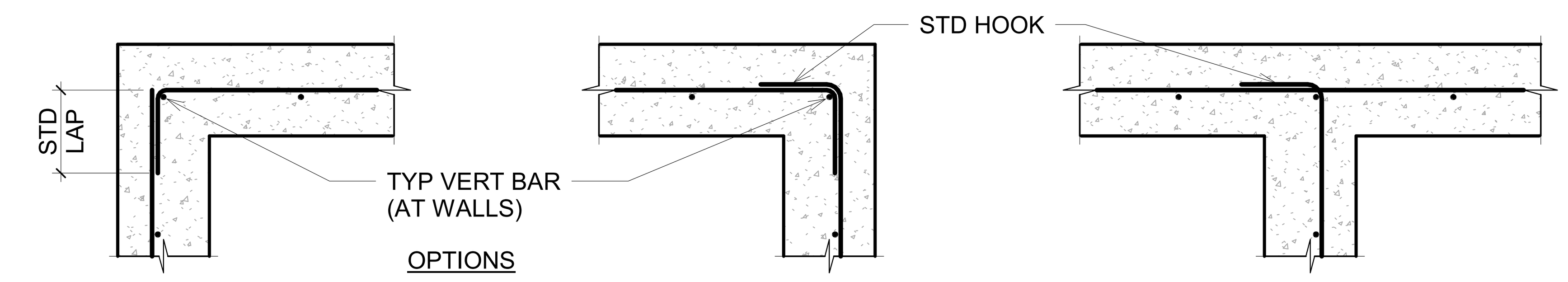
6. LAP SPLICE FOR #14 AND #18 ARE NOT ALLOWED. PROVIDE MECHANICAL OR WELDED SPLICE DEVELOPING 1.25Fy FOR THESE SPLICE. SUBMIT SELECTED SPLICE SYSTEM TO E.O.R FOR APPROVAL.

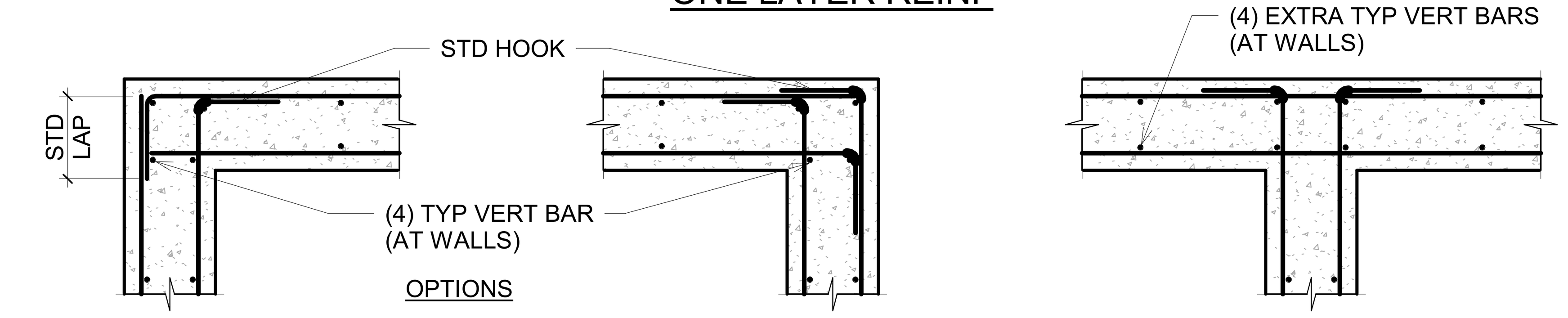
DEVELOPMENT AND SPLICE OF REBAR IN CONCRETE
1" = 1'-0" — 1 / S500

TYP OF STANDARD HOOK	STANDARD HOOK GEOMETRY FOR LONGITUDIAL REBAR: BAR SIZE	MIN. INSIDE BENDING DIAMETER	STRAIGHT EXTENSION Lext	TYPE OF STANDARD HOOKS
90º HOOK	#3 THRU #8	6db	12db	Ldh, 90.00°, DIA, Lext
	#9 THRU #11	8db		
	#14 THRU #18	10db		
135º HOOK	N/A			
180º HOOK	#3 THRU #8	6db	GREATER OF 4db AND 2-1/2"	Ldh, 180.00°, DIA, Lext
	#9 THRU #11	8db		
	#14 THRU #18	10db		

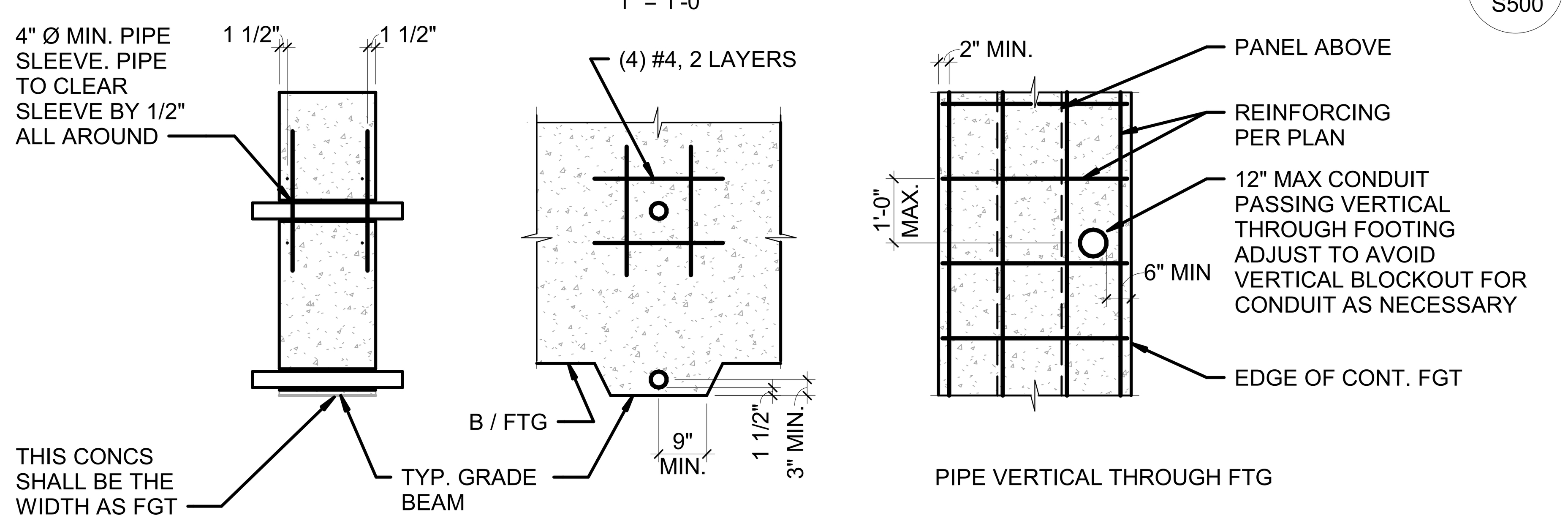
STANDARD HOOK GEOMETRY FOR STIRRUPS AND TIES: BAR SIZE	MIN. INSIDE BENDING DIAMETER	STRAIGHT EXTENSION Lext	TYPE OF STANDARD HOOKS
#3 THRU #5	4db	GREATER OF 6db AND 3"	Ldh, 90.00°, DIA, Lext
#6 THRU #8	6db	12db	
#3 THRU #5	4db	GREATER OF 6db AND 3"	Ldh, 135.00°, DIA, Lext
#6 THRU #8	6db		
#3 THRU #5	4db	GREATER OF 4db AND 2-1/2"	Ldh, 180.00°, DIA, Lext
#6 THRU #8	6db		

STANDARD HOOKS
1" = 1'-0" — 2 / S500

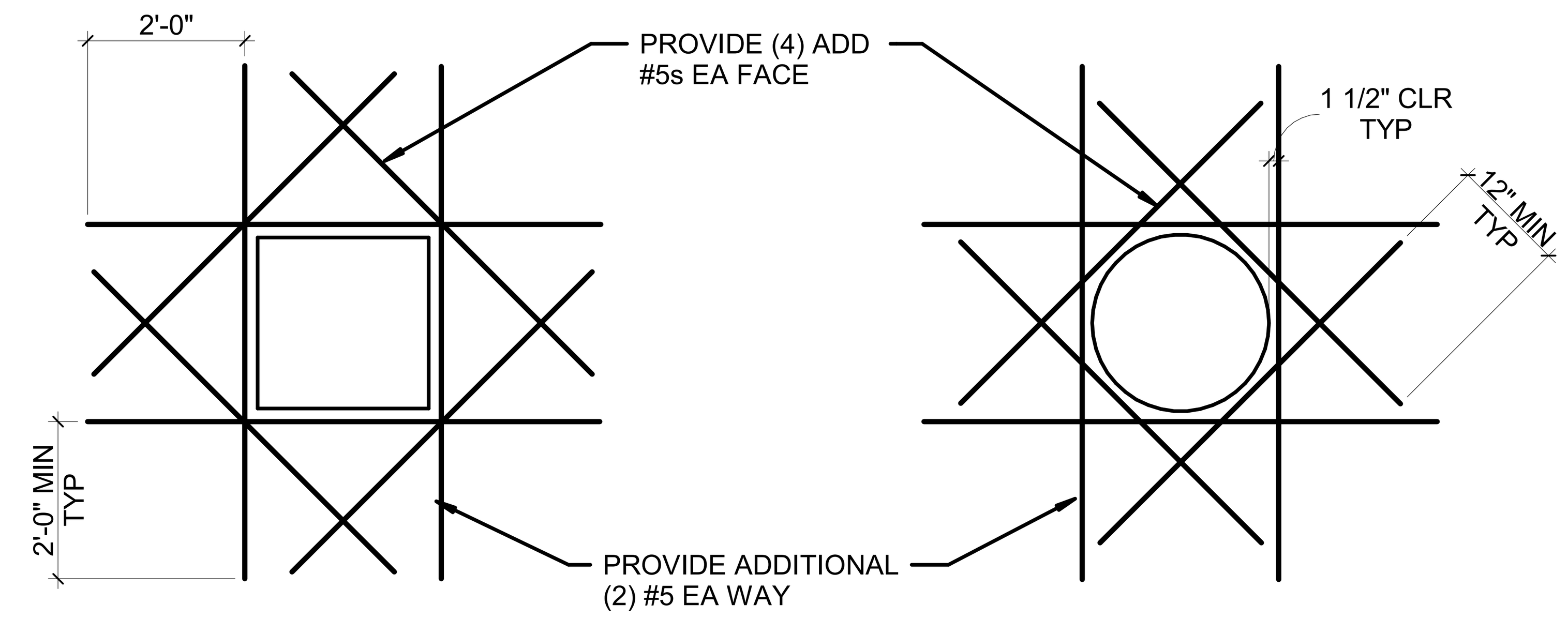




REINF AT CONCRETE WALL AND FOOTING INTERSECTIONS
1" = 1'-0" — 3 / S500

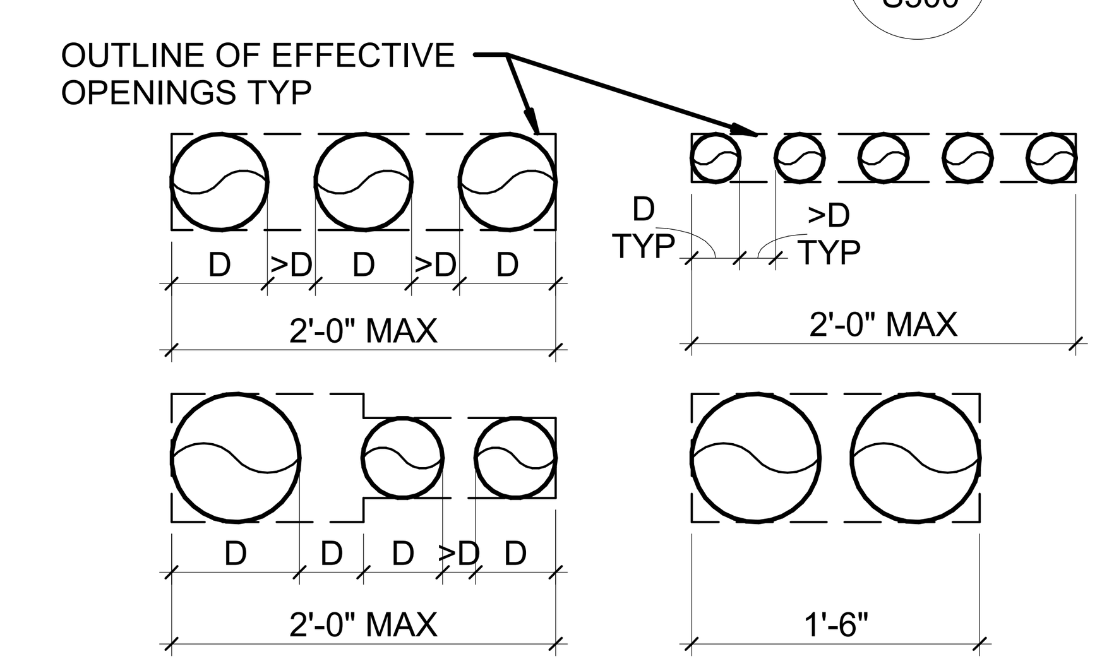


PIPING AT GRADE BEAMS AND FOOTINGS
1/2" = 1'-0" — 4 / S500



NOTE:
THESE DETAILS ARE APPLICABLE FOR OPENINGS WITH SIDE OR DIAMETER DIMENSIONS GREATER THAN 12"

TYPICAL OPENING ADDTIONAL REINFORCING
1/2" = 1'-0" — 5 / S500



PLANS

NOTES:
1. ALL ABOVE CONDITIONS REQUIRE 1 #5 TOP AND BOTTOM TRIM BARS ALL AROUND THE EFFECTIVE OPENING w/ 1'-6" MIN EMBEDMENT PAST THE OPENING EDGE. DIAGONAL BARS ARE NOT REQUIRED
2. THIS DETAIL APPLIES WHERE SPACING OF OPENINGS IS LESS THAN 3 D

MULTIPLE ROUND SLAB OPENINGS
1" = 1'-0" — 6 / S500

PROJECT ARCHITECT:				
DRAWN BY: LMY				
REVIEWED BY: LMY				
REVIEWED BY: MISC				
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021
	DATE	REVISION	BY	DATE

REGION NO. 10 STATE: WASH
FEDERAL AID PROJECT NO.
UB PERMIT HEDG00000025
FCR NO:
DESIGN NO:
CONTRACT NO:

ALISON M. WYATT — STATE OF WASHINGTON — 51513 — REGISTERED PROFESSIONAL ENGINEER

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Washington State Department of Transportation
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NORTHUP PREWASH RETROFIT NPDES - NWR
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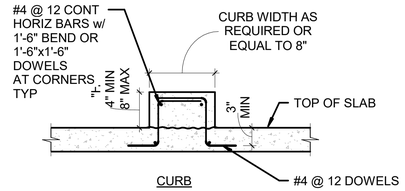
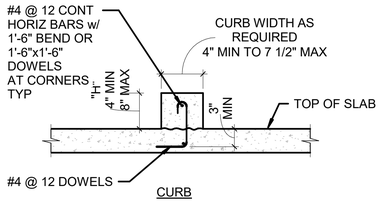
CITY OF BELLEVUE, WA
TYPICAL CONCRETE DETAILS

S500
SHEET OF SHEETS

3/4/2022 10:35:00 AM D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt



CURB



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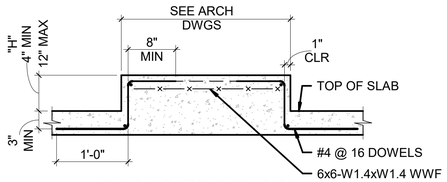
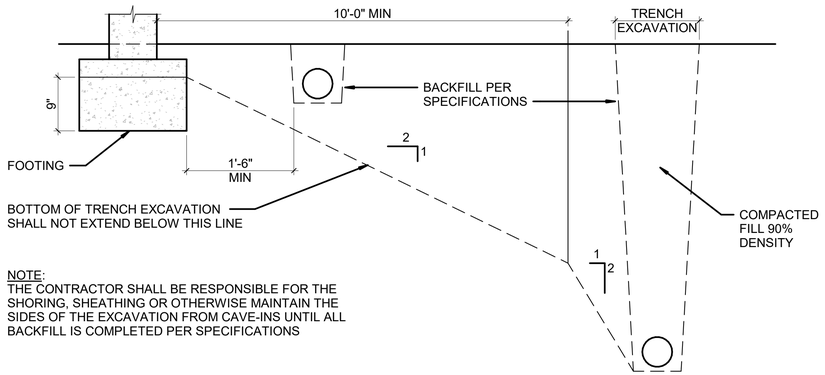


ISLAND AND MECHANICAL PADS

NOTES:
1. FOR CURB SIZES AND LOCATION SEE ARCH DWGS
2. PROVIDE INSERTS AS REQUIED BY ARCH AND MECH DWGS
3. FOR PADS INSTALLED AFTER SLAB, REINFORCING CAN BE EPOXY DOWELLED INTO SLAB WITH 4" MIN EMBED

TYPICAL CONCRETE CURBS AND ISLANDS

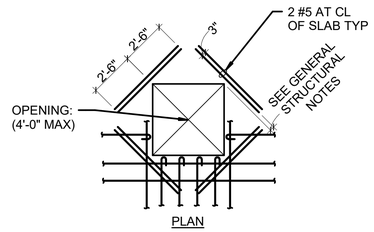
1" = 1'-0" — 1 / S501



NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHORING, SHEATHING OR OTHERWISE MAINTAIN THE SIDES OF THE EXCAVATION FROM CAVE-INS UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS

EXCAVATION PARALLEL TO FOOTING

1" = 1'-0" — 2 / S501

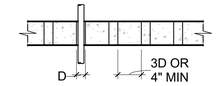


PLAN

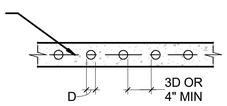
NOTES:
1. ALL TOP AND BOTTOM SLAB BARS INTERRUPTED BY OPENING SHALL BE REPLACED BY ADDITIONAL REINFORCING EQUAL TO THAT INTERRUPTED. PLACE HALF OF THE ADDITIONAL REINFORCING ON EACH SIDE OF OPENING AND EXTEND SAME LENGTH AS REQUIRED OR BAR LAP OF INTERRUPTED REINFORCING
2. BOXED OUT OPENINGS, RECESSES AND PIPE SLEEVE CLUSTERS SHALL BE TREATED AS FRAMED SLAB OPENING

TYPICAL OPENING IN SLAB DETAIL

1/4" = 1'-0" — 4 / S501



PIPING THROUGH SLAB OR WALL

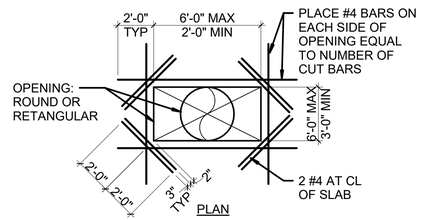


CONDUIT THROUGH SLAB OR WALL

NOTES:
1. D = T/3 OR 2" MAXIMUM WHICHEVER IS LESS
2. WHERE CLEAR DISTANCE BETWEEN SLEEVES IS IMPOSSIBLE, THIS AREA SHALL BE TREATED AS A SLAB OPENING SEE TYPICAL DETAIL

PIPING AND CONDUIT IN OR THROUGH SLAB OR WALL

1" = 1'-0" — 3 / S501



PLAN

NOTES:
1. ALL TOP AND BOTTOM SLAB BARS INTERRUPTED BY OPENING SHALL BE REPLACED BY ADDITIONAL REINFORCING EQUAL TO THAT INTERRUPTED. PLACE HALF OF THE ADDITIONAL REINFORCING ON EACH SIDE OF OPENING AND EXTEND SAME LENGTH AS REQUIRED OR BAR LAP OF INTERRUPTED REINFORCING
2. BOXED OUT OPENINGS, RECESSES AND PIPE SLEEVE CLUSTERS SHALL BE TREATED AS FRAMED SLAB OPENING

TYPICAL OPENING IN SLAB DETAIL

1/4" = 1'-0" — 5 / S501

PROJECT ARCHITECT:					REGION NO: 10	STATE: WASH
DRAWN BY: LMY					FEDERAL AID PROJECT NO:	**UB PERMIT HEDG00000025**
REVIEWED BY: LMY						
REVIEWED BY: MISC						
					FCR NO:	
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021	DESIGN NO:	
	DATE	REVISION	BY	DATE	CONTRACT NO:	

ALLISON M. WYATT — STATE OF WASHINGTON — 26101 — REGISTERED PROFESSIONAL ENGINEER

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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES - NWR

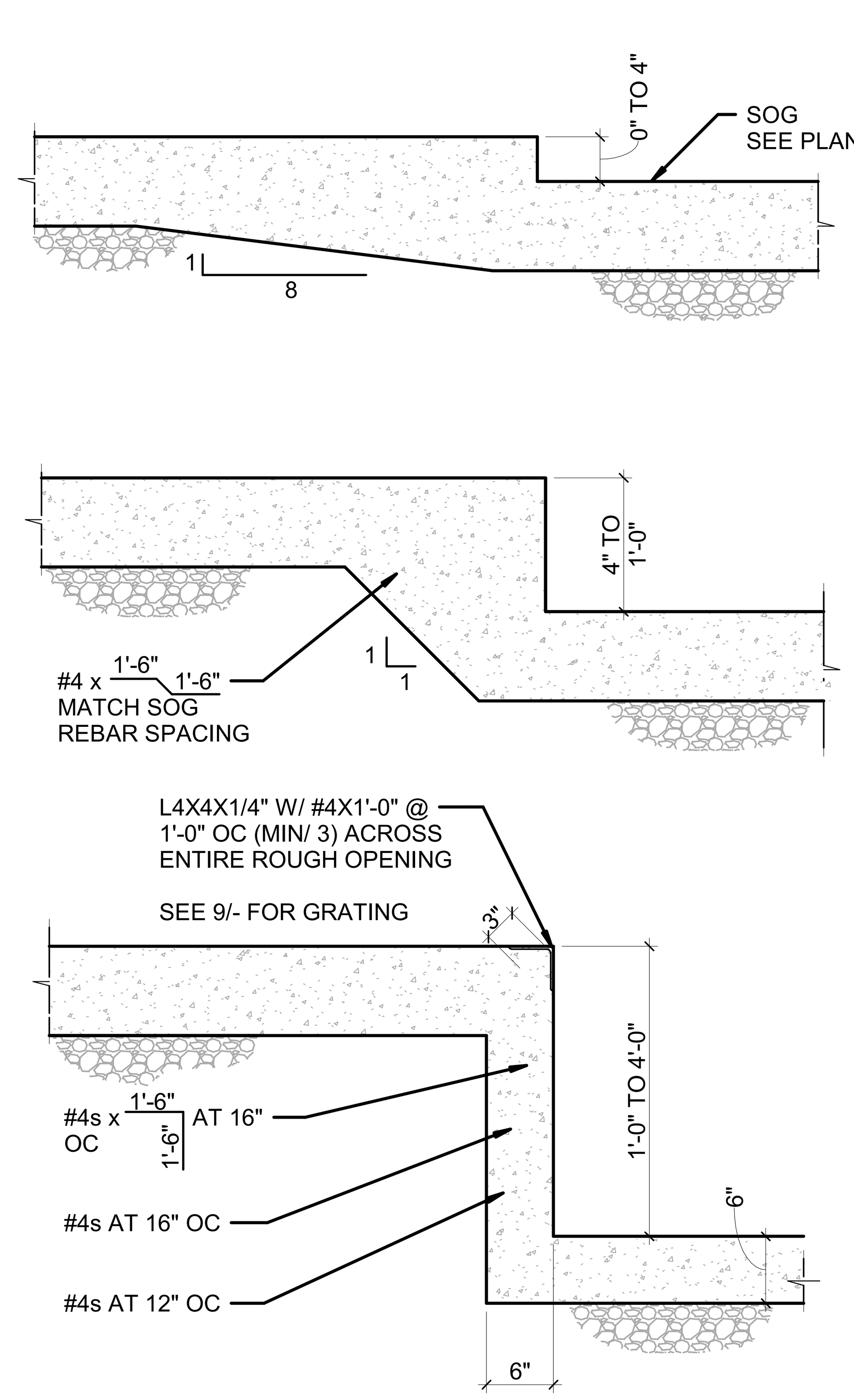
BID SET

CITY OF BELLEVUE, WA

TYPICAL CONCRETE DETAILS

S501 — SHEET OF SHEETS

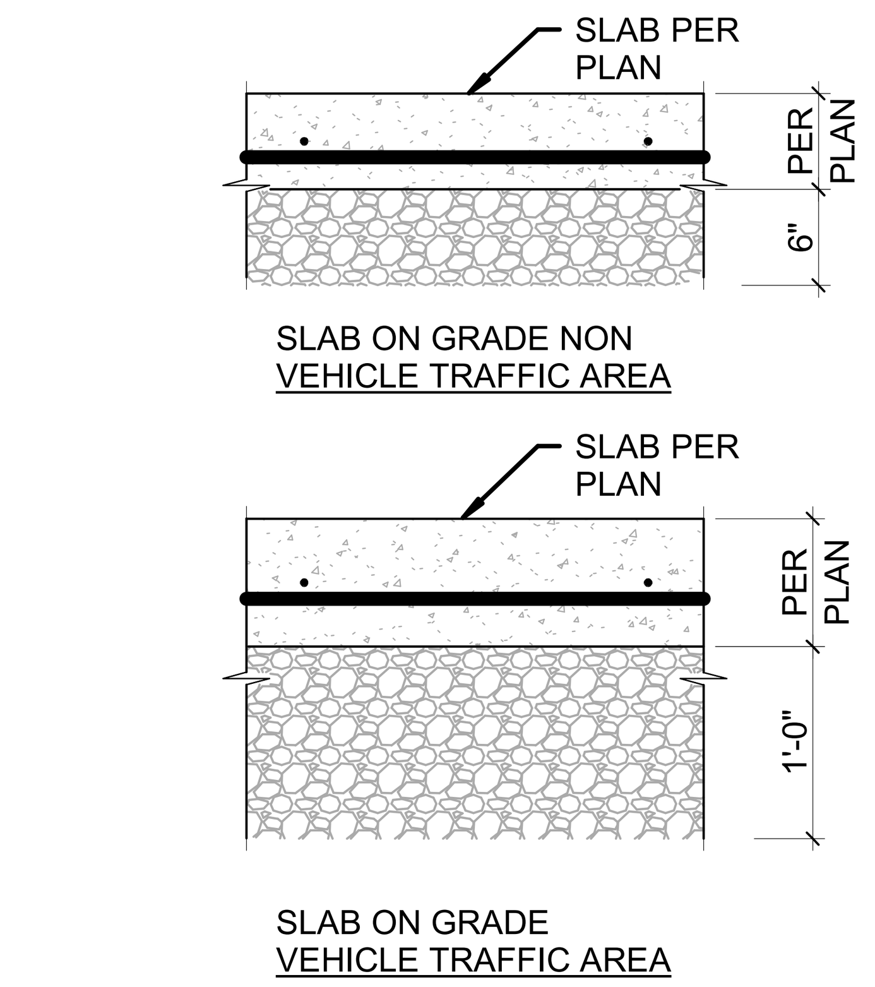
3/4/2022 10:35:01 AM D:_Revit\Northrup Wash Canopy - Rv20_lmy\GBPWM.rvt



TYPICAL STEPPED SLAB ON GRADE AND TRENCH/PIT DETAIL

1" = 1'-0"

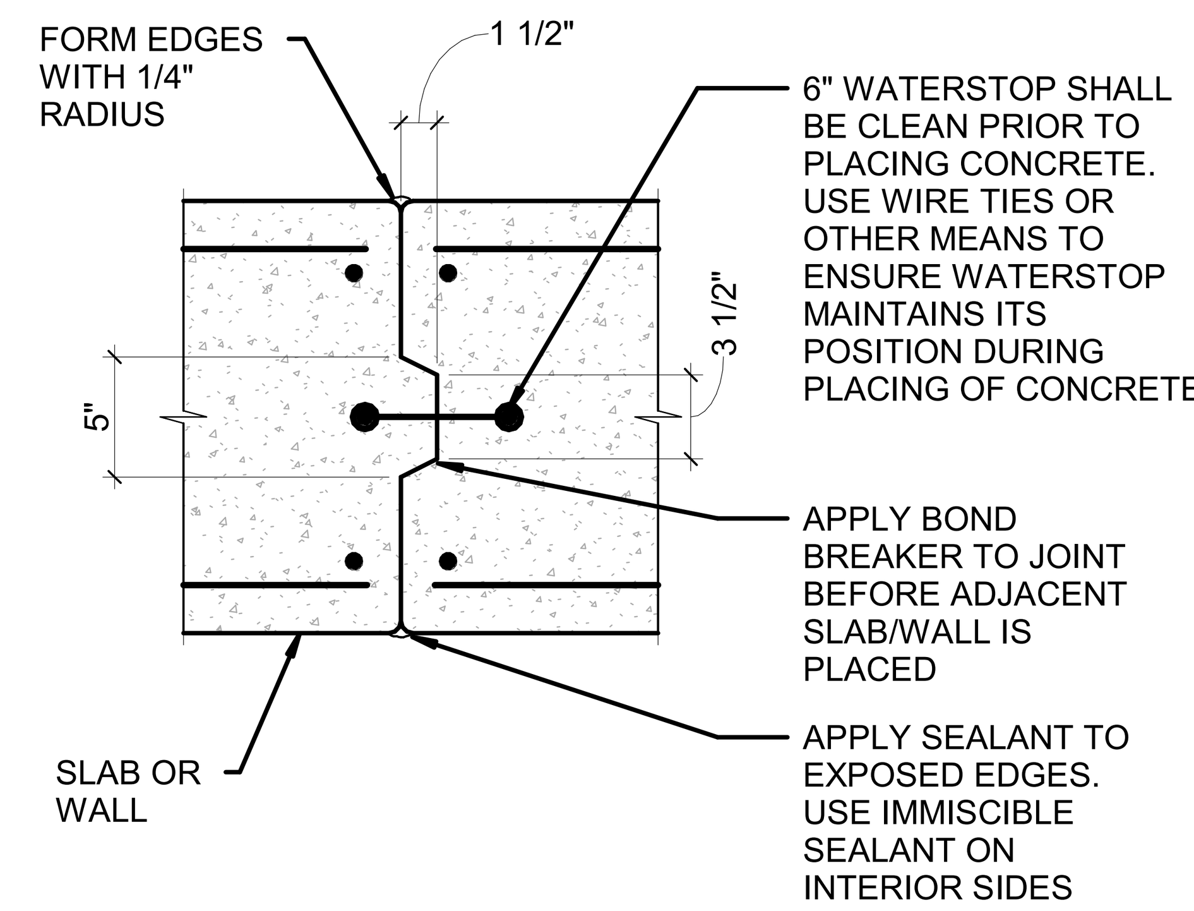
1 S502



SLAB ON GRADE

1" = 1'-0"

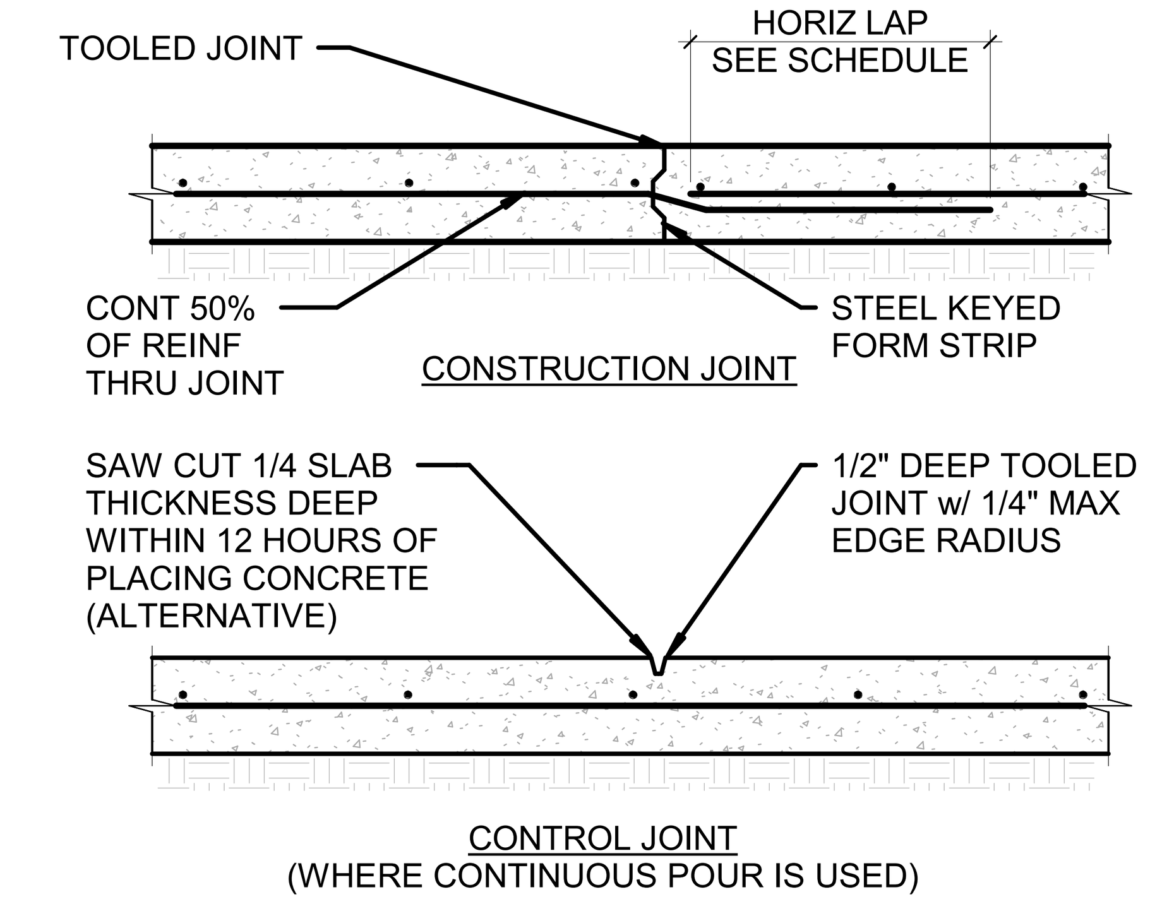
2 S502



TYPICAL SLAB CONTRACTION JOINT

1 1/2" = 1'-0"

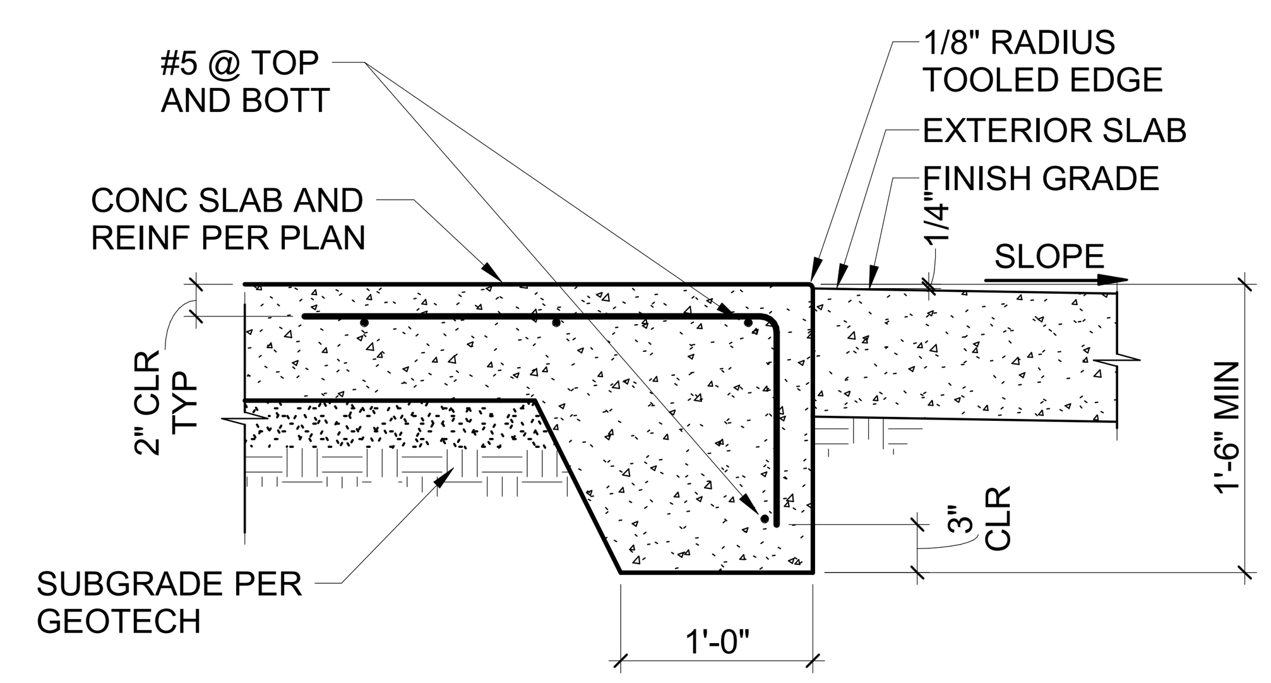
3 S502



TYPICAL CONSTRUCTION AND CONTROL JOINTS

1" = 1'-0"

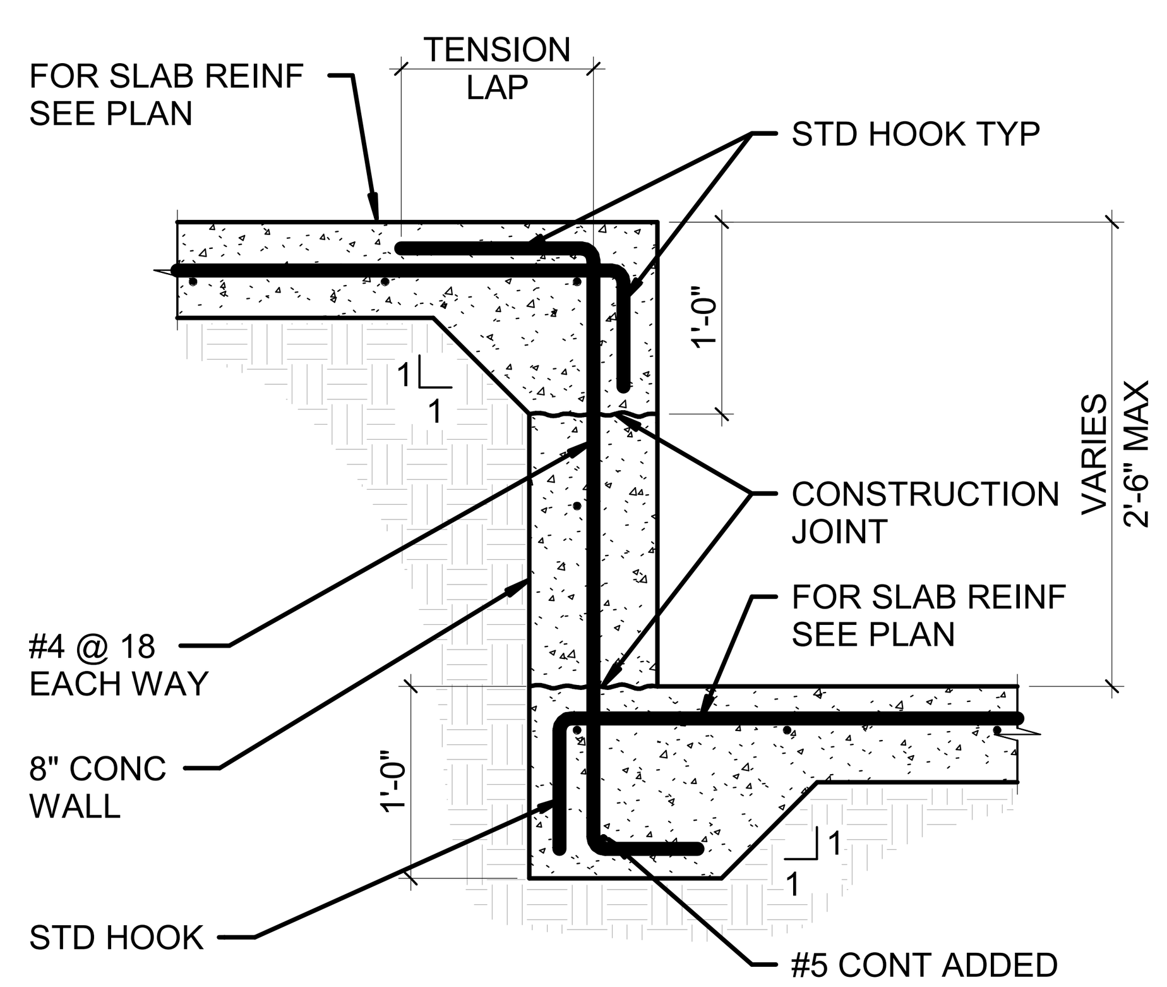
4 S502



TURN DOWN SLAB EDGE

1" = 1'-0"

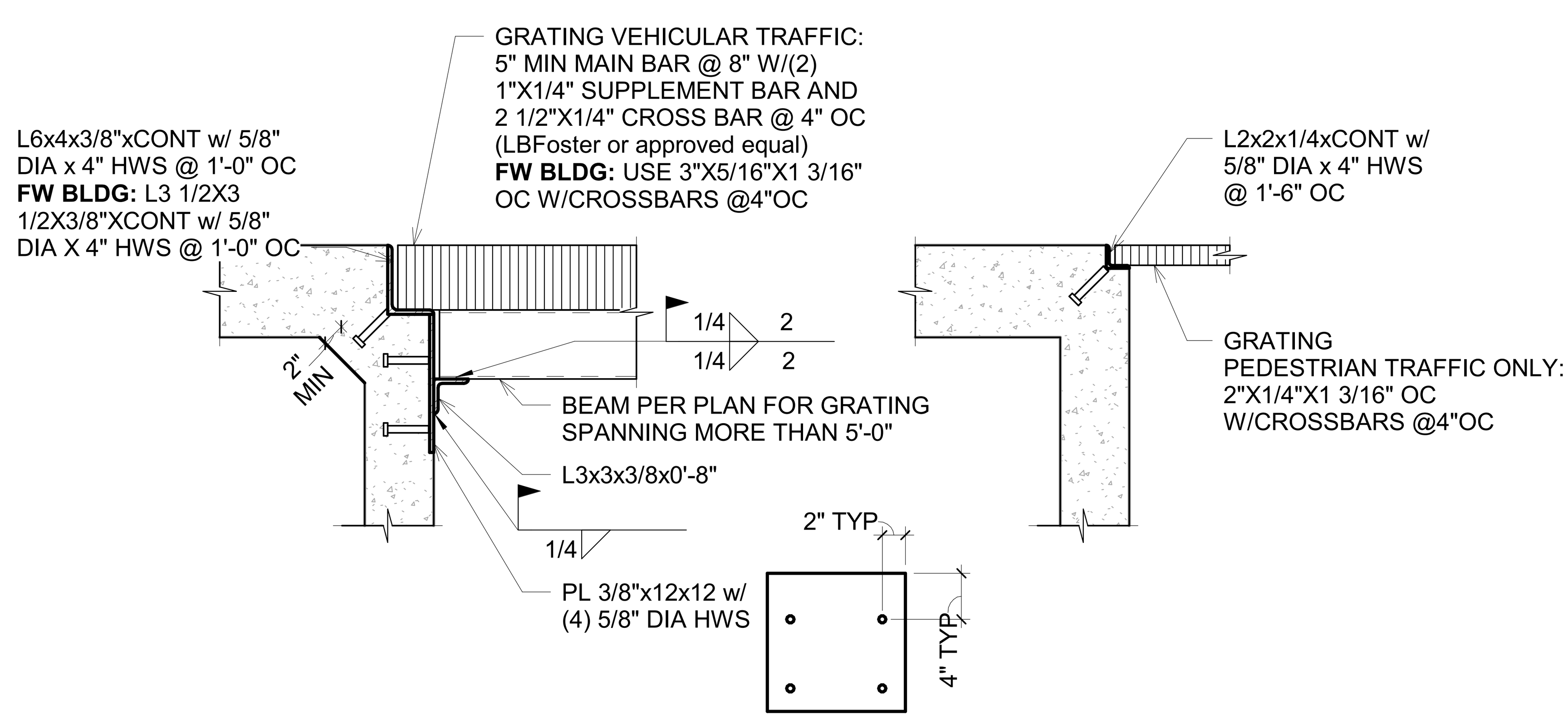
5 S502



TYPICAL STEP IN SLAB ON GRADE

1" = 1'-0"

8 S502



GRATING CONNECTION DETAIL

1" = 1'-0"

9 S502

PROJECT ARCHITECT:				
DRAWN BY: LMY				
REVIEWED BY: LMY				
REVIEWED BY: MISC				
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021
	DATE	REVISION	BY	DATE

REGION NO. 10 STATE: WASH
FEDERAL AID PROJECT NO.
UB PERMIT
HEDG00000025
FCR NO:
DESIGN NO:
CONTRACT NO:

ALISON M. WYATT
STATE OF WASHINGTON
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Washington State
Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES - NWR

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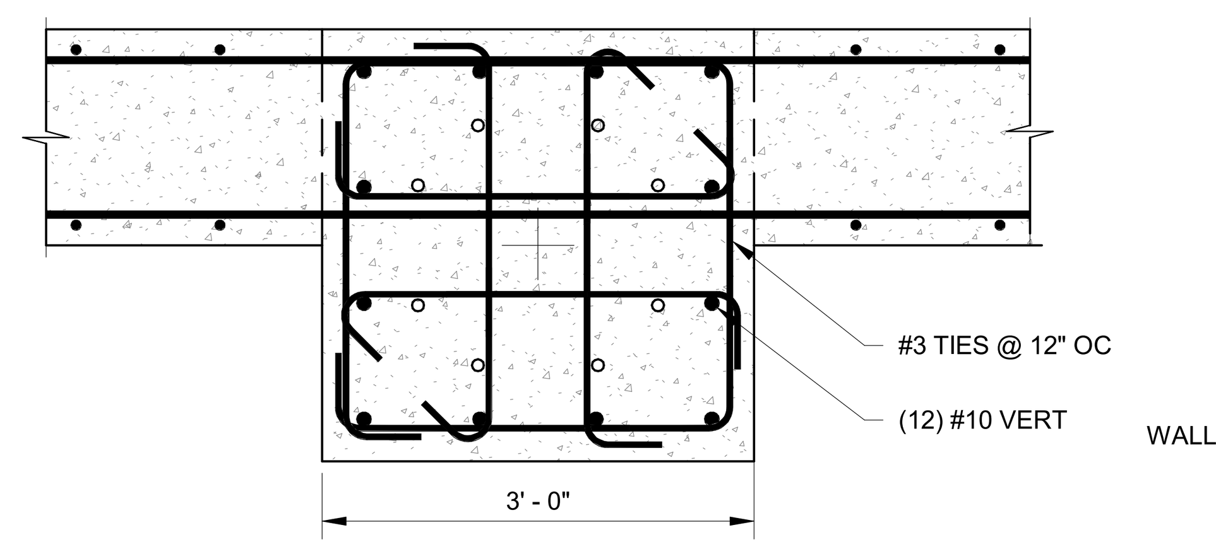
CITY OF BELLEVUE, WA

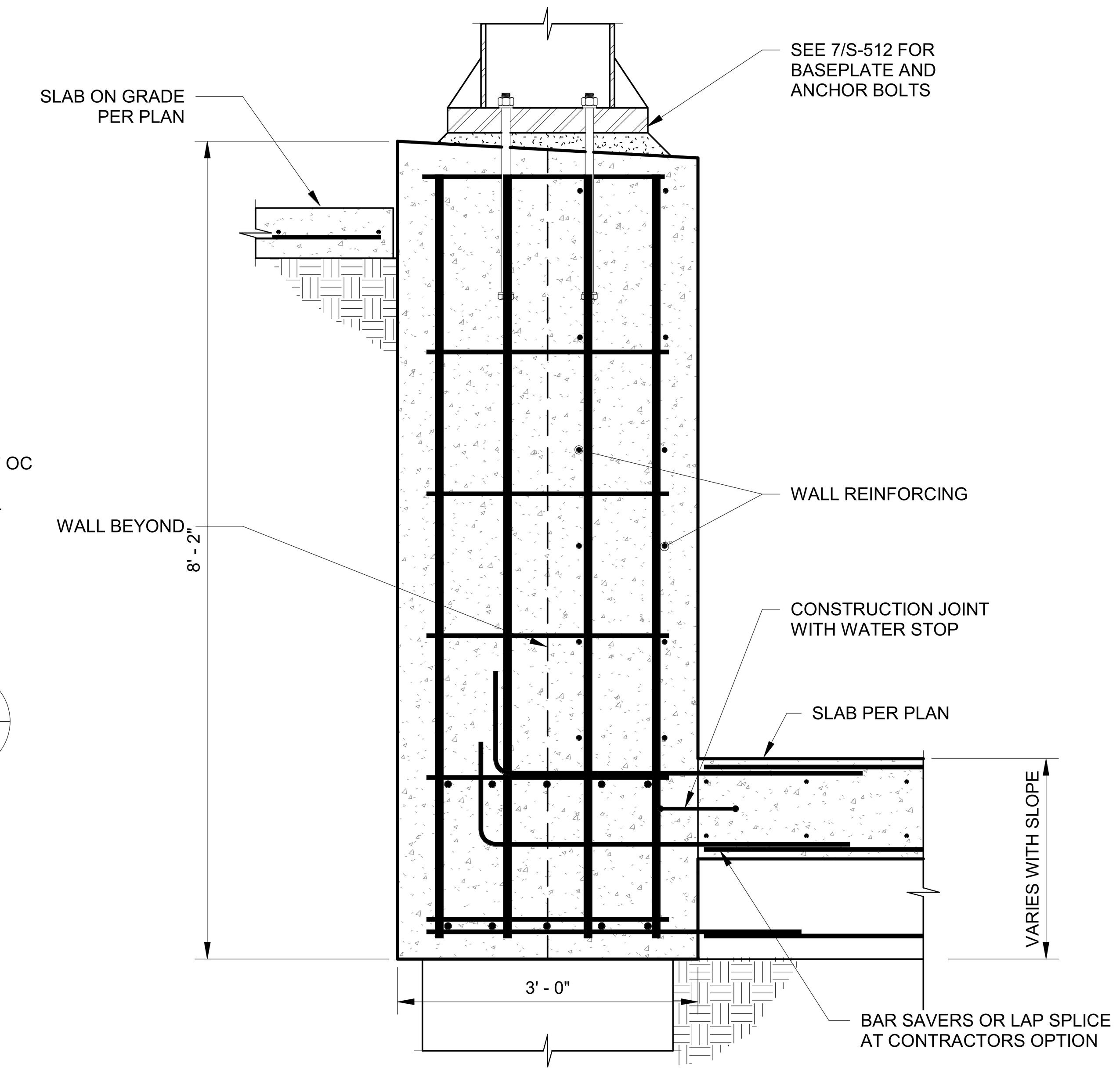
TYPICAL CONCRETE DETAILS

S502
SHEET
OF
SHEETS

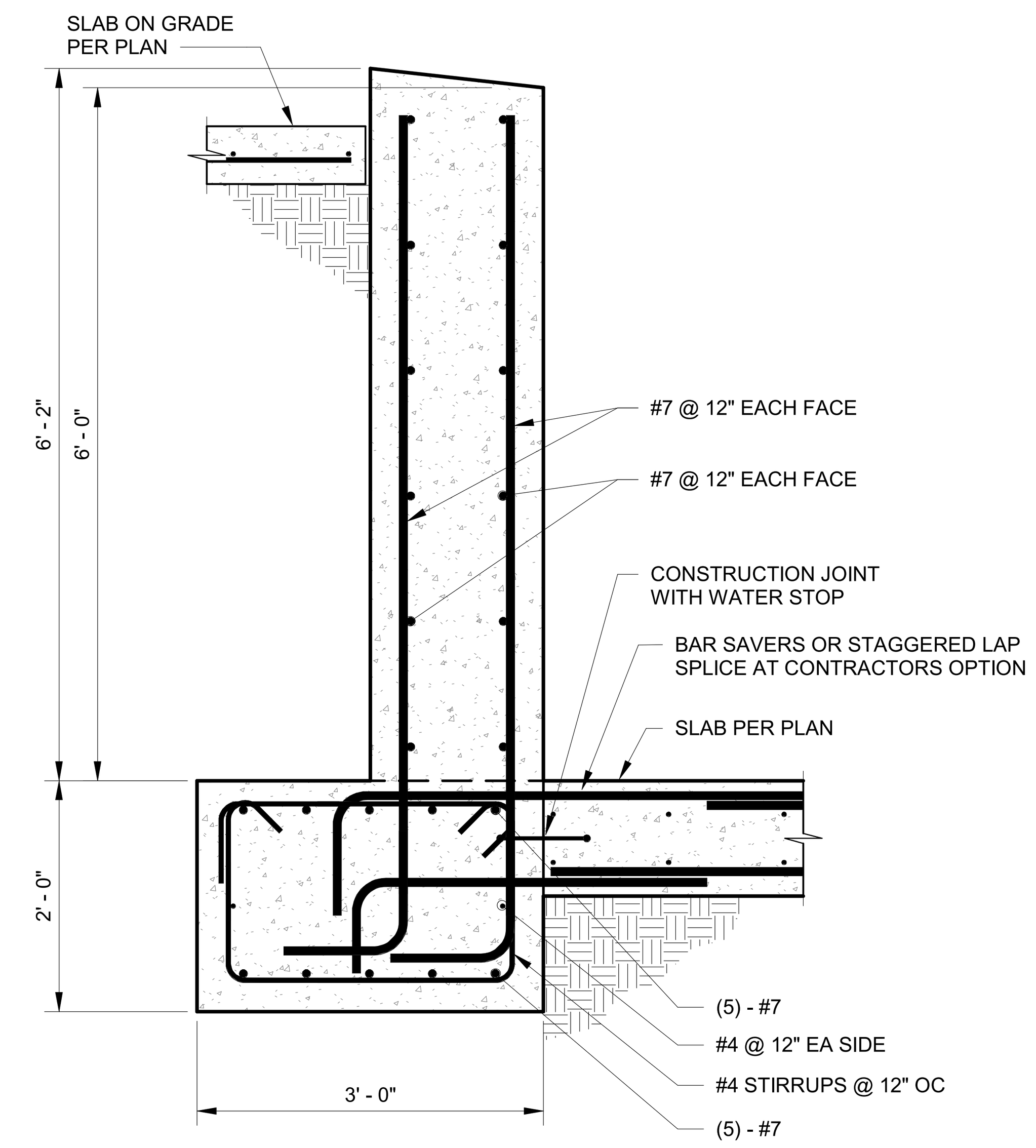
3/4/2022 10:35:01 AM D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt



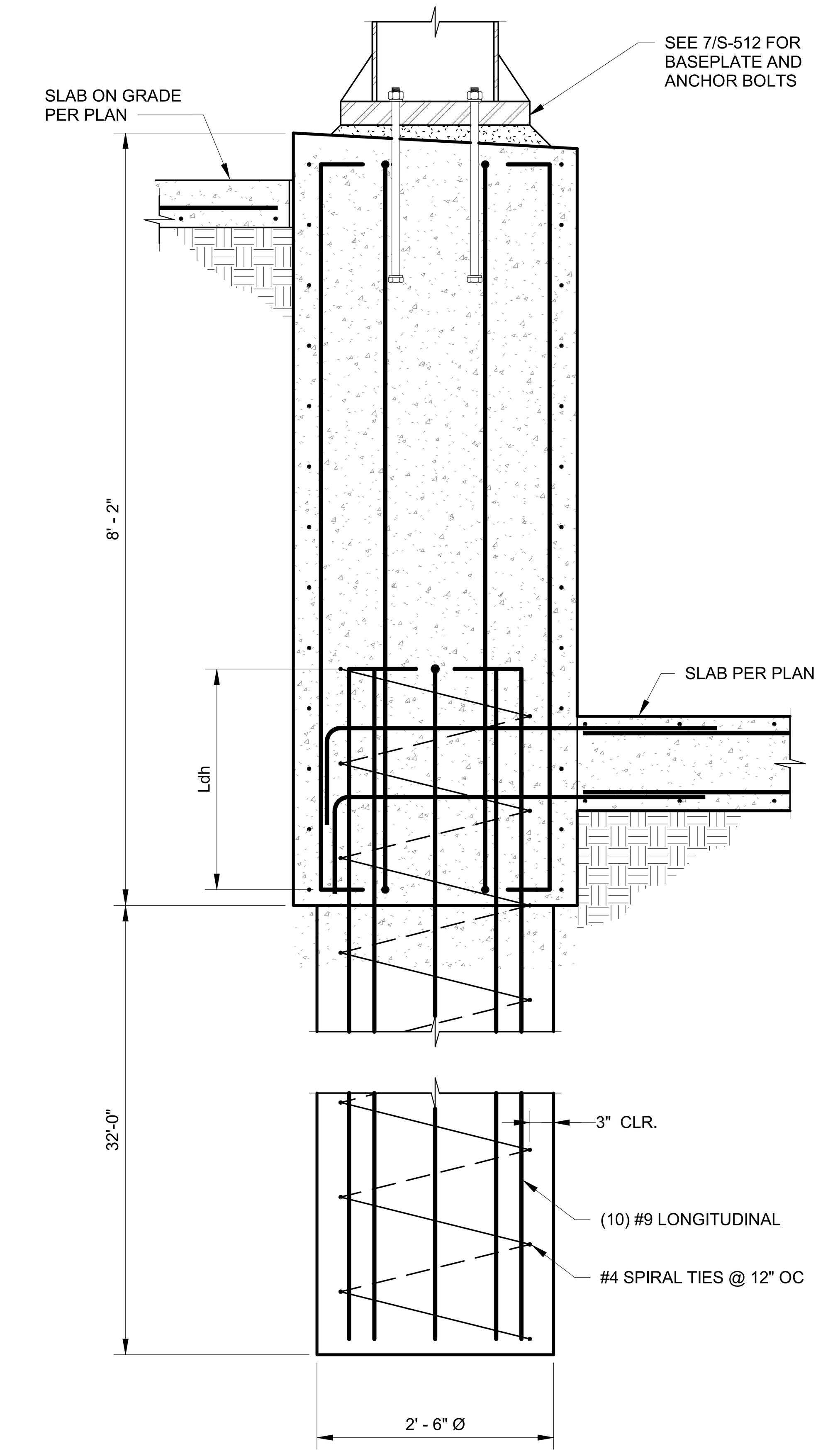
CONCRETE PILASTER AND WALL SECTION
3/4" = 1'-0"
1
S511



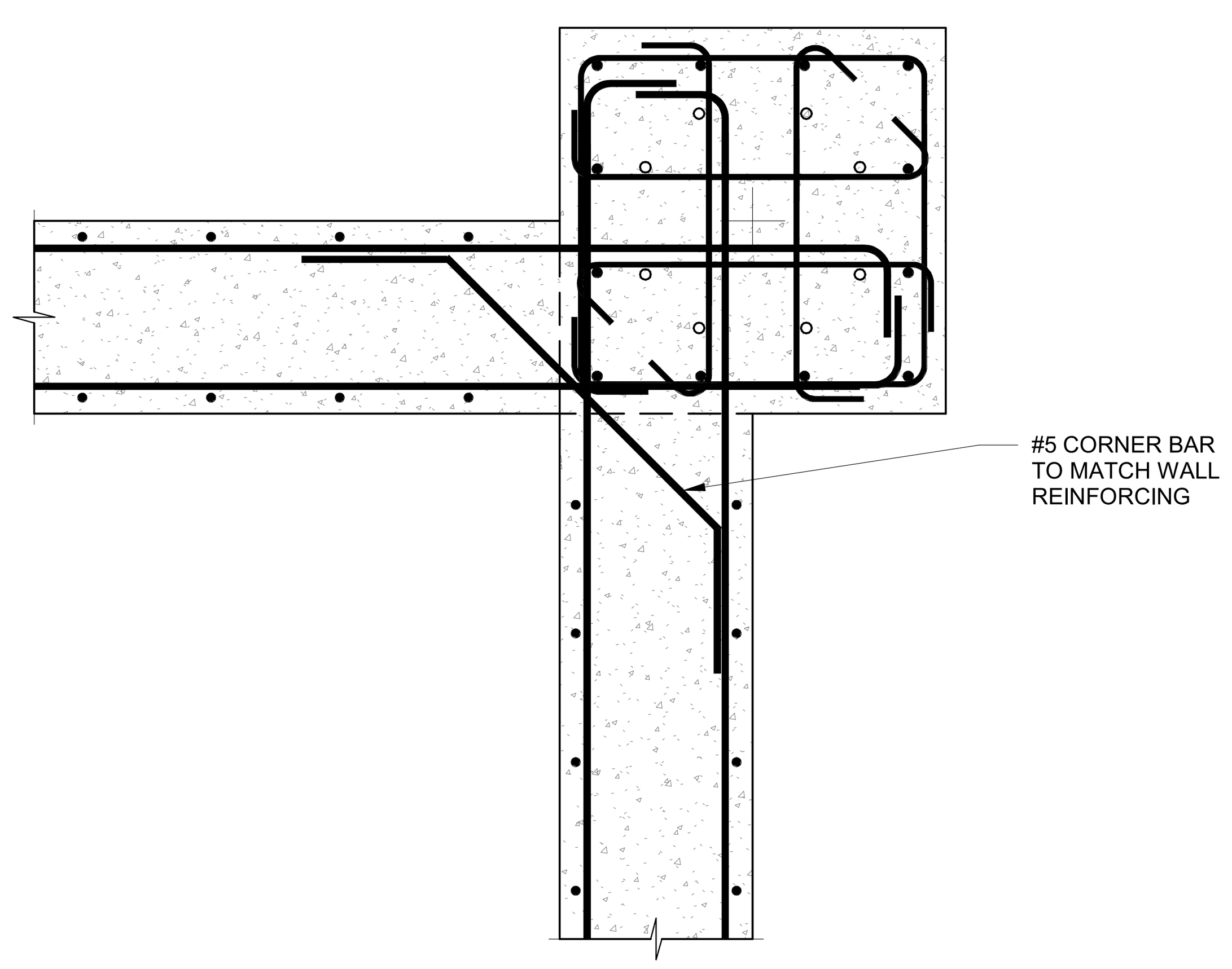
GRADE BEAM AT COLUMN
3/4" = 1'-0"
2
S511



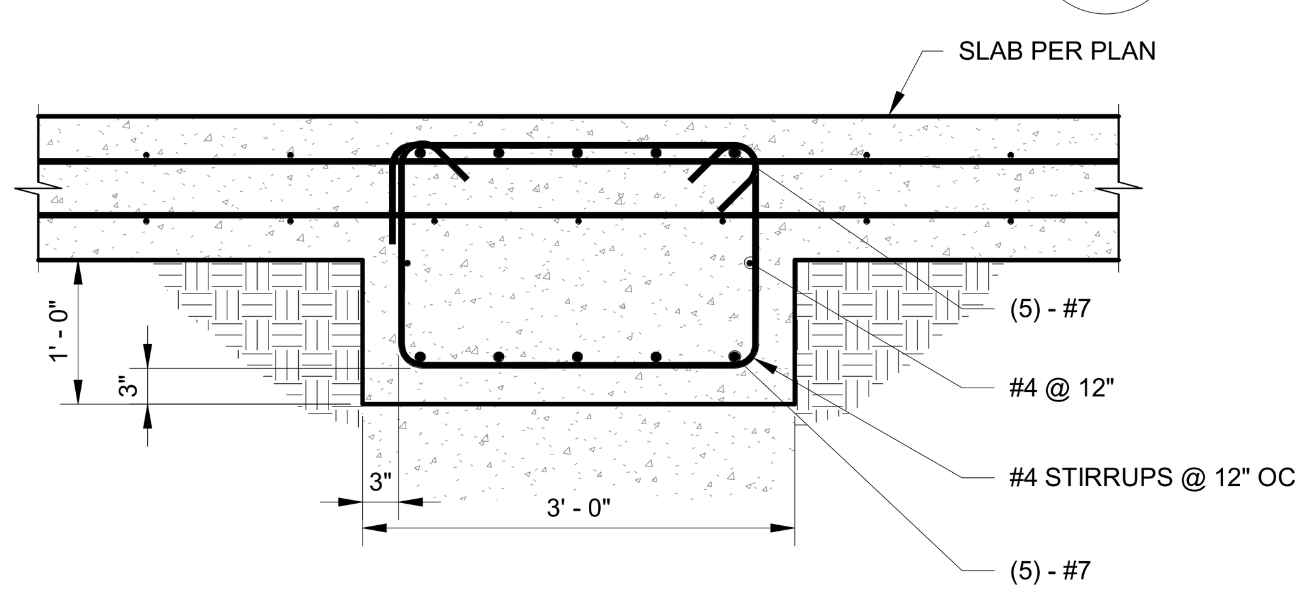
GRADE BEAM AT WALL
3/4" = 1'-0"
3
S511



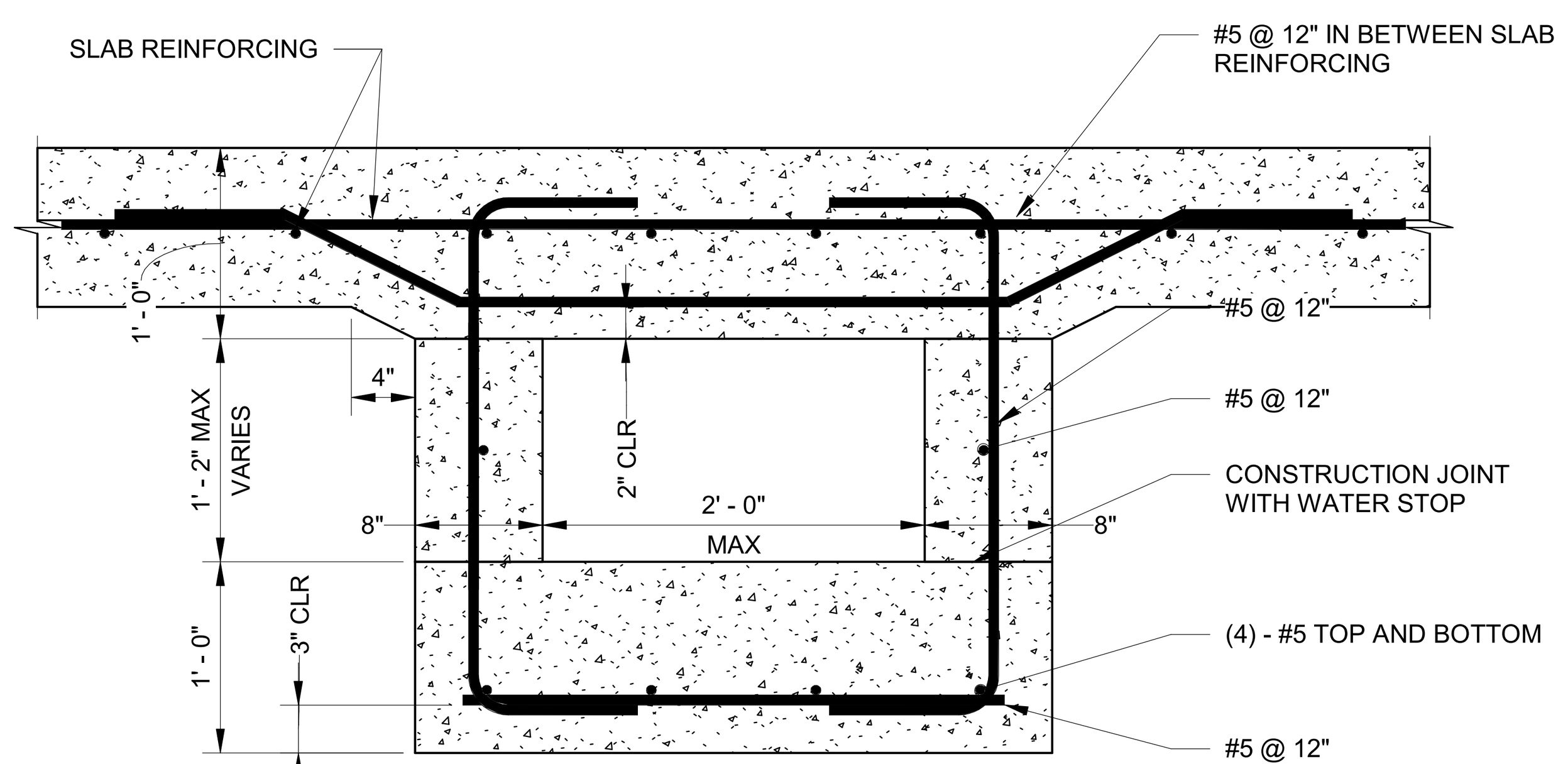
DRILLED SHAFT AND COLUMN DETAIL
3/4" = 1'-0"
4
S511



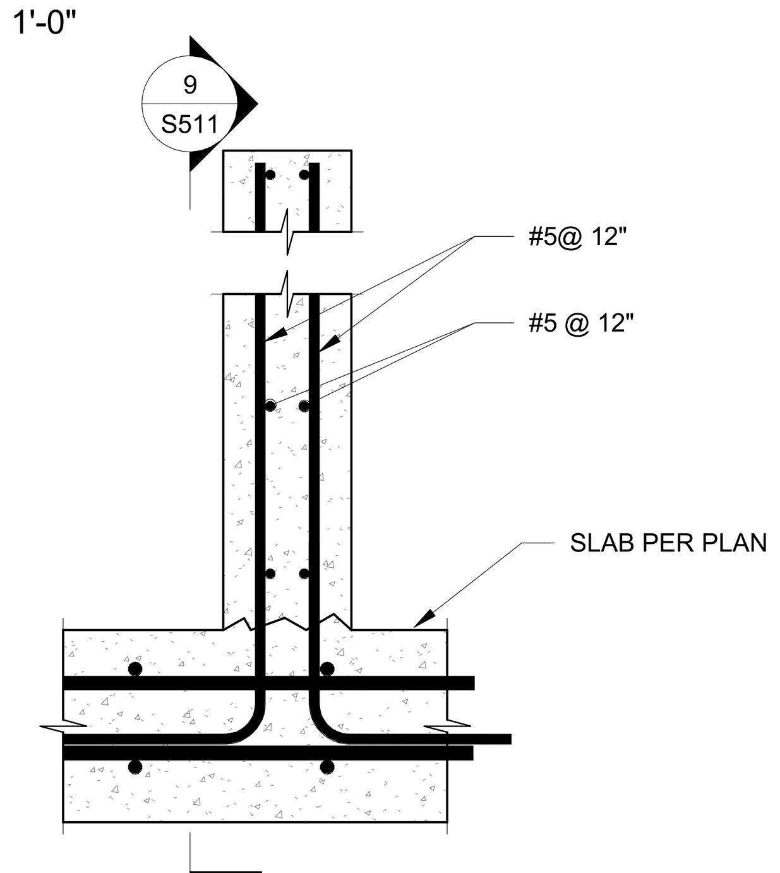
CONCRETE PILASTER AT CORNER
3/4" = 1'-0"
5
S511



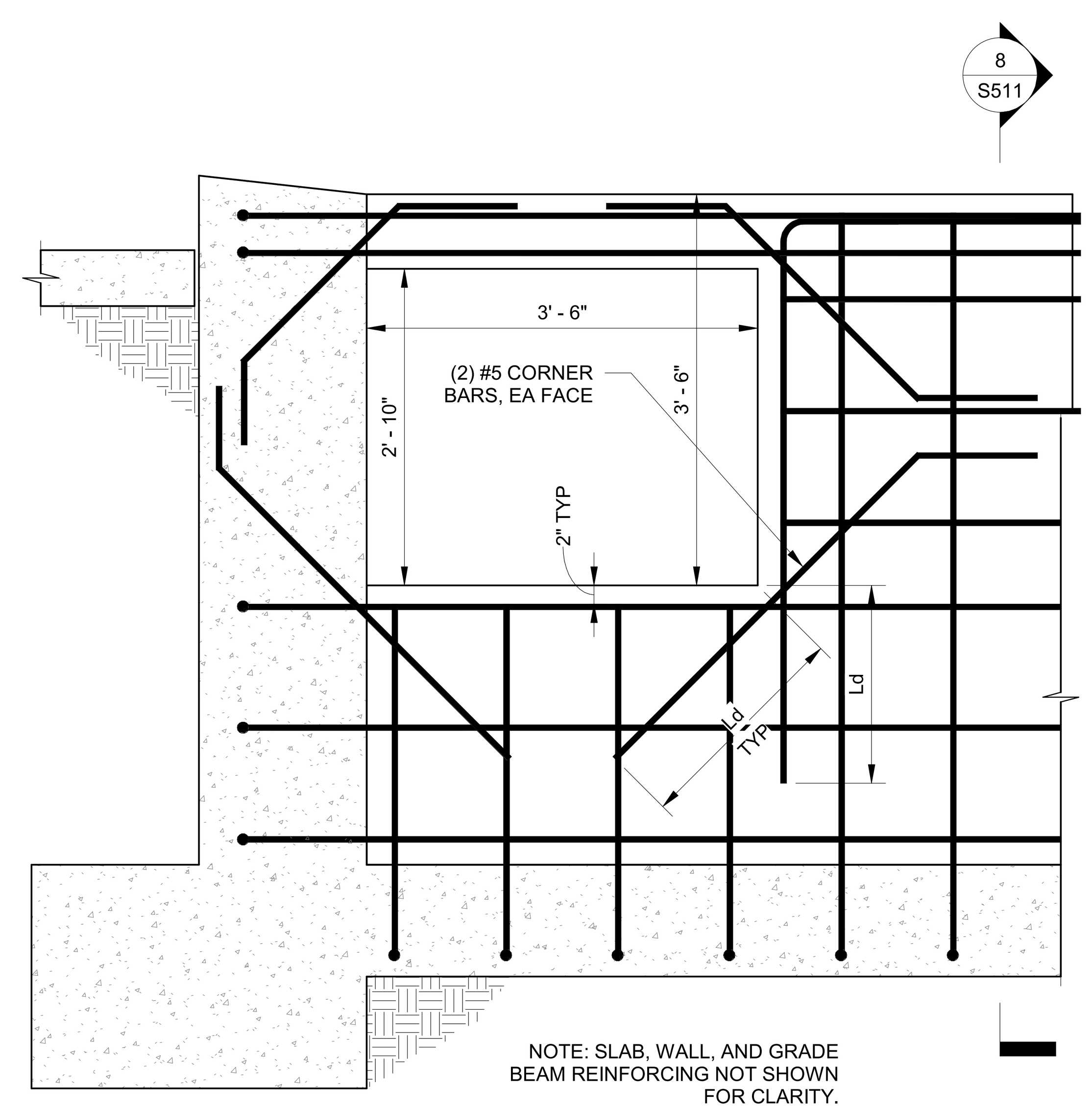
GRADE BEAM BELOW BASIN
3/4" = 1'-0"
6
S511



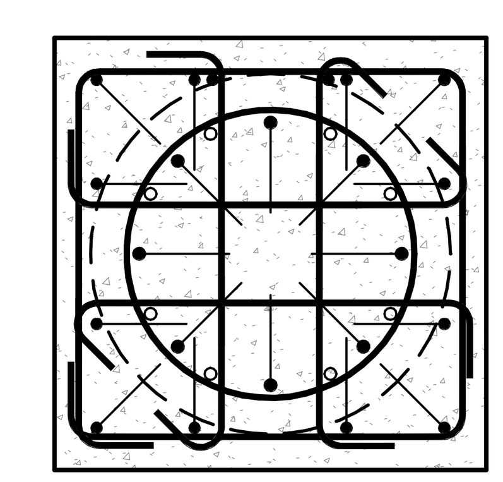
TRENCH SECTION
1" = 1'-0"
7
S511



CONCRETE BASIN DIVIDER WALL
1" = 1'-0"
8
S511



CONCRETE BASIN DIVIDER WALL
3/4" = 1'-0"
9
S511



DRILLED SHAFT AT COLUMN
3/4" = 1'-0"
10
S511

PROJECT ARCHITECT:					REGION NO. 10 STATE: WASH
DRAWN BY: LMY					FEDERAL AID PROJECT NO.
REVIEWED BY: LMY					UB PERMIT HEDG00000025
REVIEWED BY: AMWY					
					FCR NO:
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021	DESIGN NO:
	DATE	REVISION	BY	DATE	CONTRACT NO:

ALISON M. WYATT
STATE OF WASHINGTON
51513
REGISTERED PROFESSIONAL ENGINEER

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2100 Southwest River Parkway
Portland Oregon 97201
Phone: 503.223.6663

Washington State
Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES - NWR

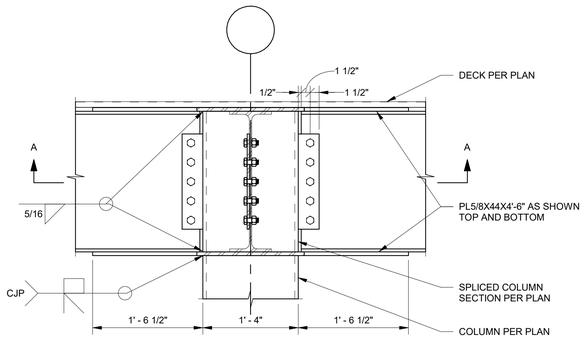
BID SET

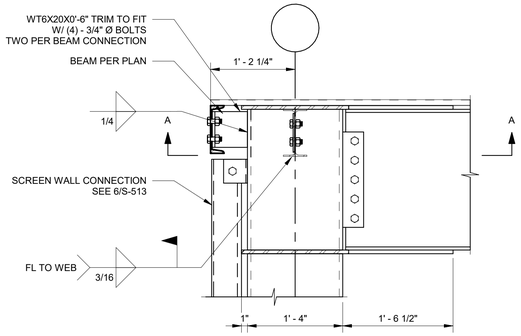
CITY OF BELLEVUE, WA

CONCRETE FRAMING DETAILS

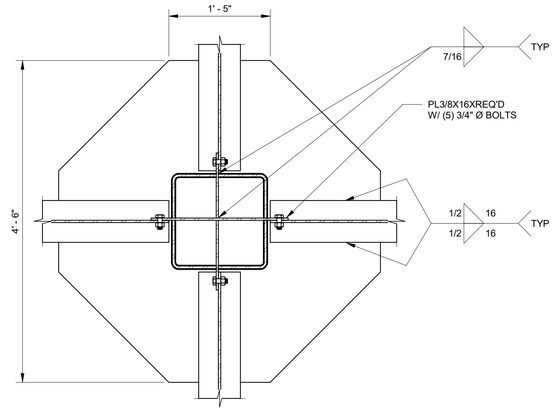
S511
SHEET
OF
SHEETS

D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt
3/4/2022 10:35:02 AM

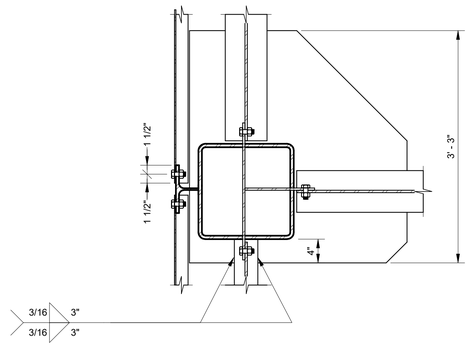




SEE 1/- FOR BALANCE OF DETAILS.



SECTION A - A



SECTION A - A

COLUMN MOMENT CONNECTION

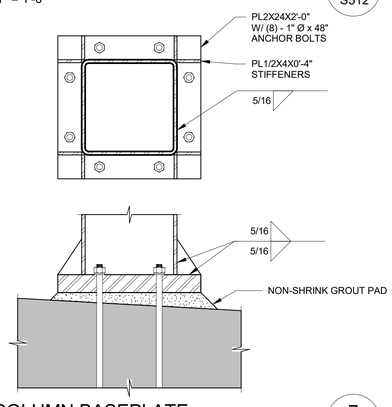
1" = 1'-0"

1 S512

COLUMN MOMENT CONNECTION AT CORNER

1" = 1'-0"

2 S512



COLUMN BASEPLATE

1" = 1'-0"

7 S512

PROJECT ARCHITECT:					REGION NO. 10	STATE: WASH	
DRAWN BY: LMY					FEDERAL AID PROJECT NO.		
REVIEWED BY: LMY					**UB PERMIT HEDG00000025**		
REVIEWED BY: MISC							
					FCR NO:		
AS BUILT BY:	8/2/2021	REVISION 0; ISSUED FOR PERMIT	LMY	8/2/2021	DESIGN NO:		
	DATE	REVISION	BY	DATE	CONTRACT NO:		

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NORTHUP PREWASH RETROFIT NPDES - NWR

BID SET

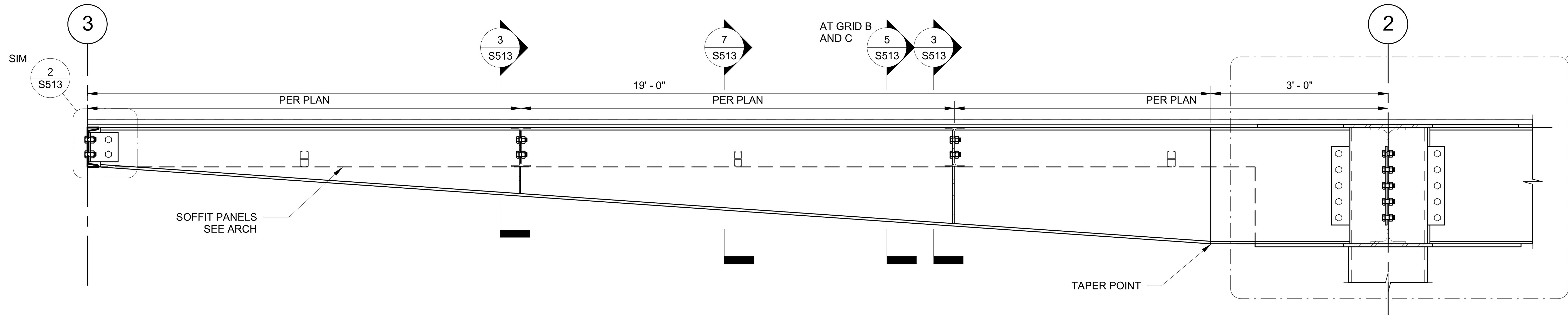
CITY OF BELLEVUE, WA

STEEL FRAMING DETAILS

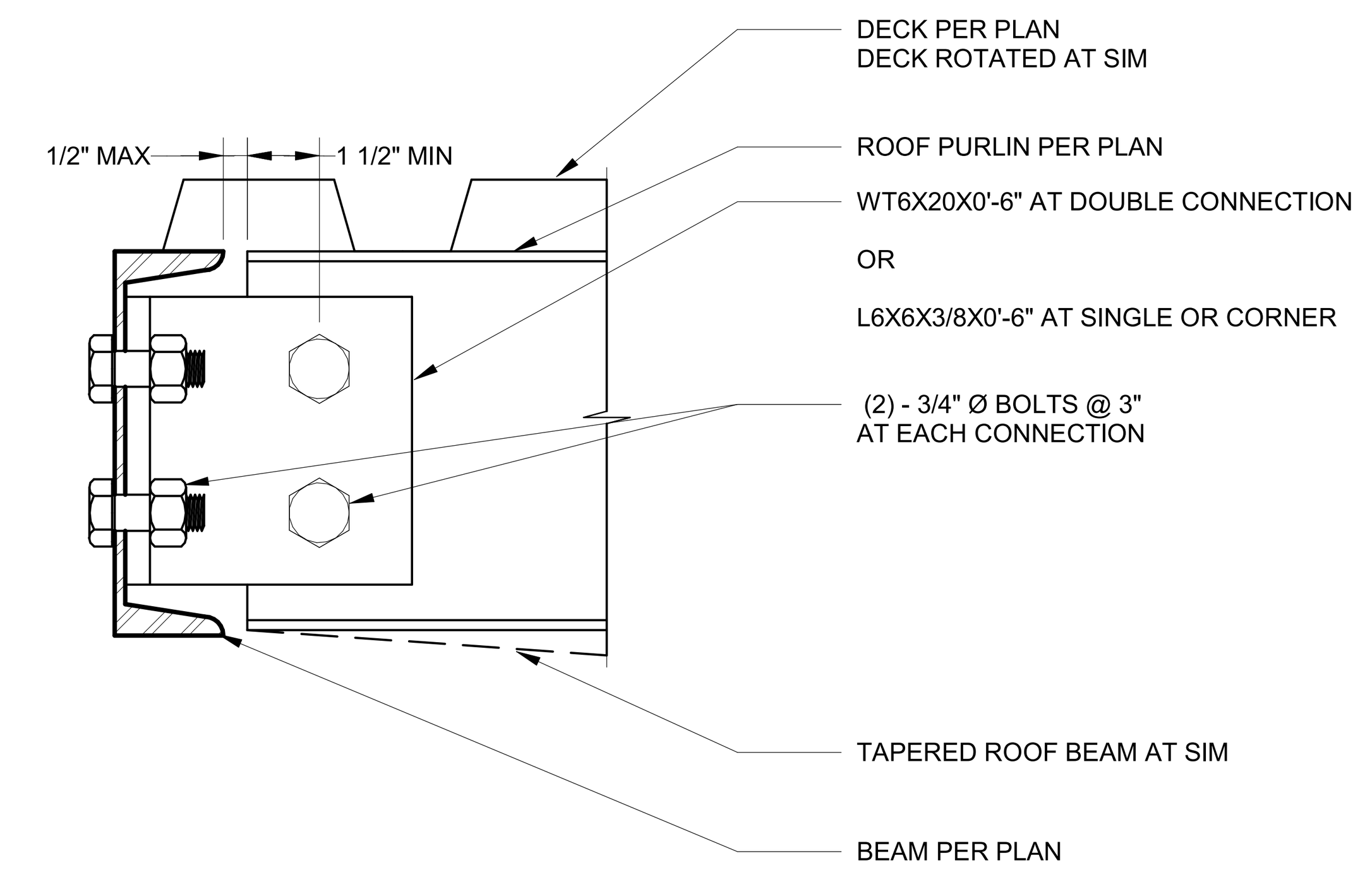
S512

SHEET OF SHEETS

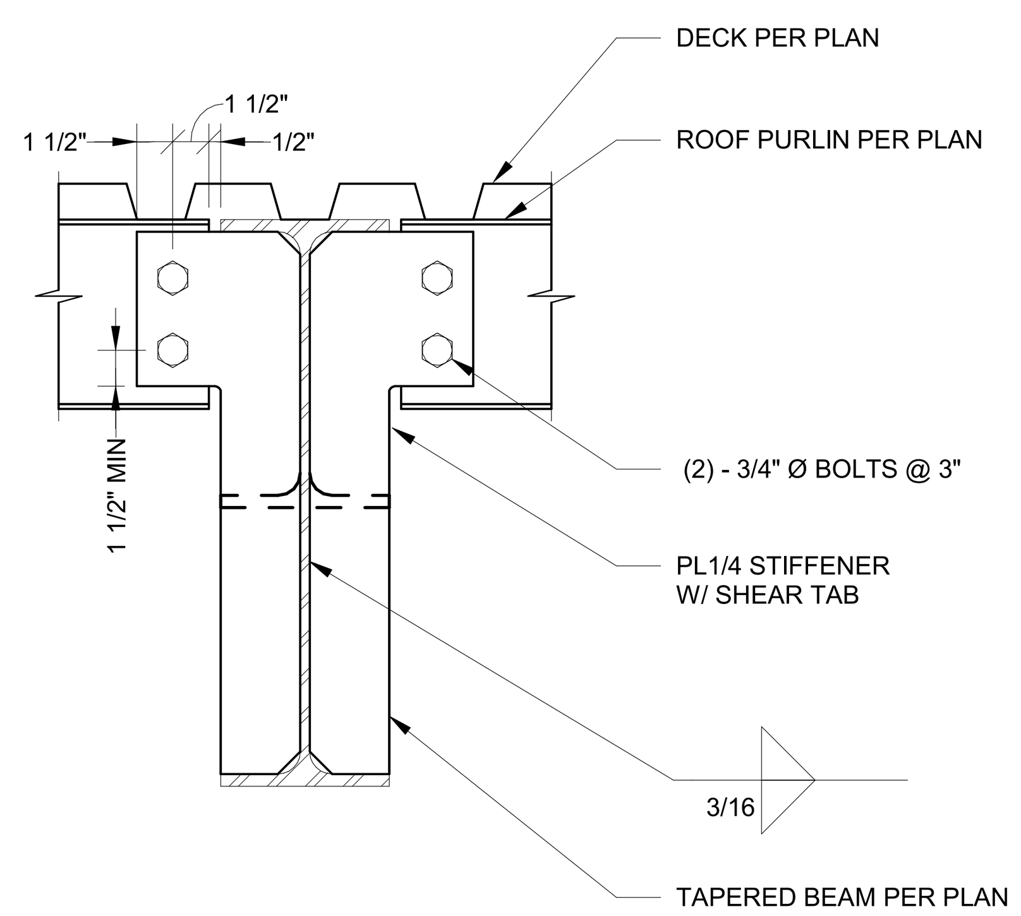
3/4/2022 10:35:03 AM D:_Revit\Northrup Wash Canopy_RvtSD_lmy\QBPXM.rvt



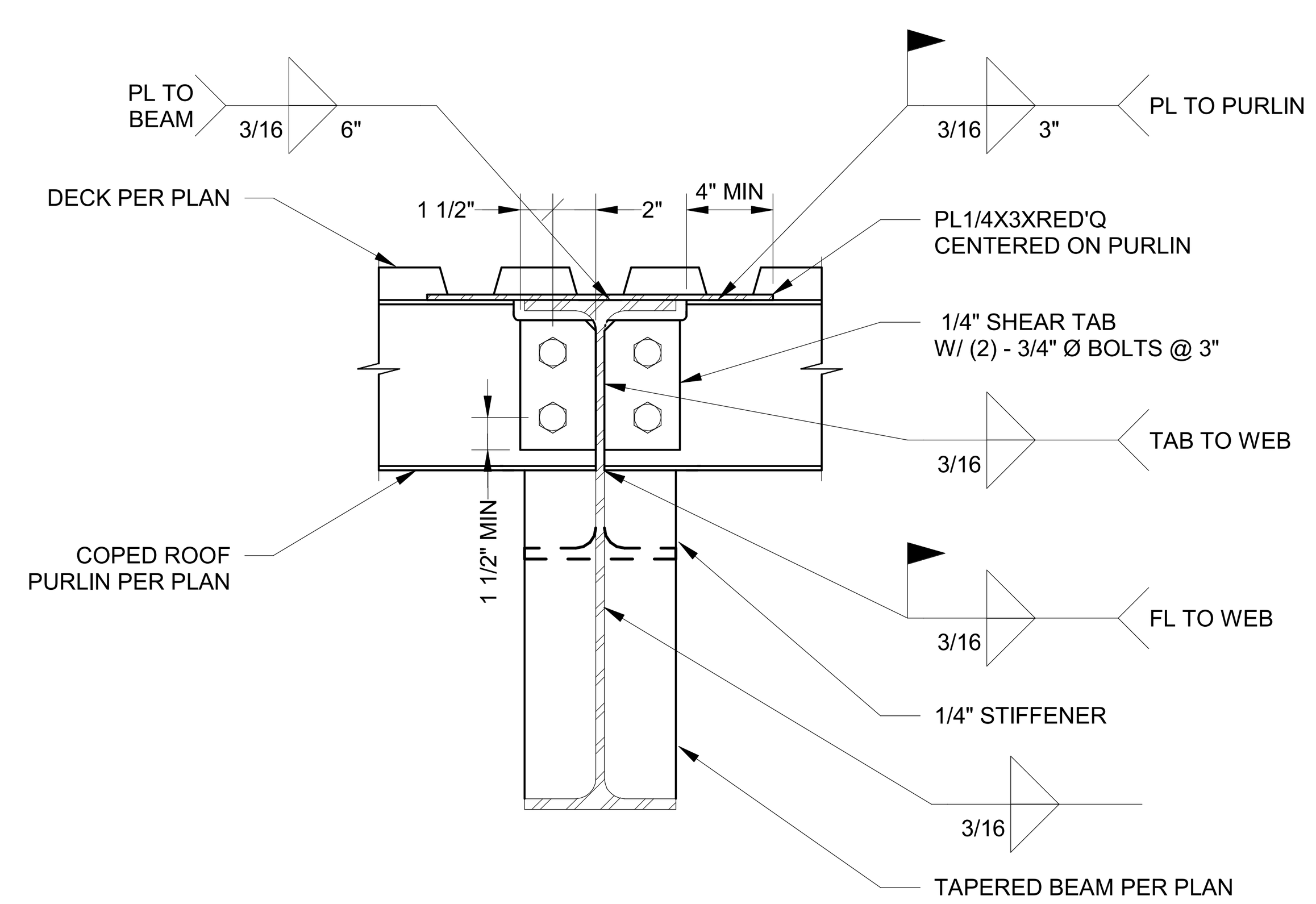
ROOF BEAM ELEVATION 1 S513
3/4" = 1'-0"



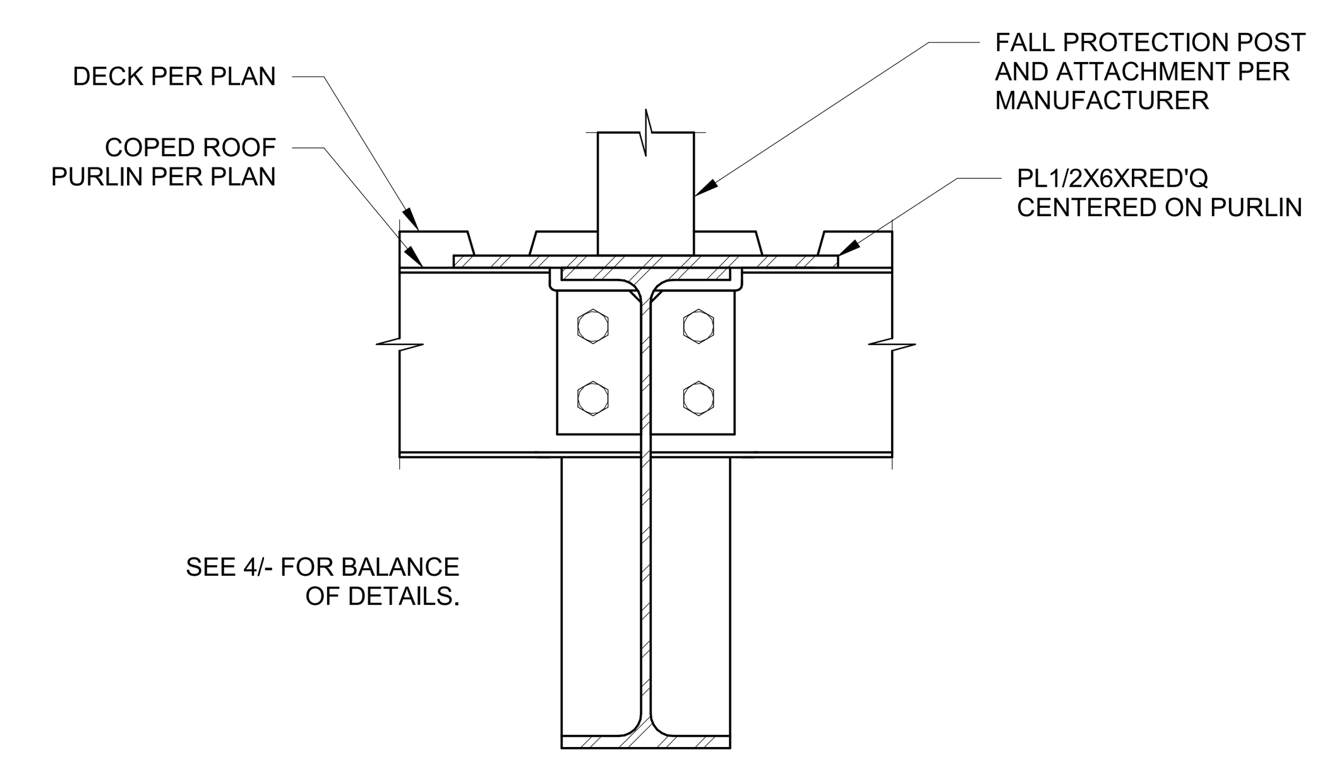
ROOF EDGE TO BEAM CONNECTION 2 S513
3" = 1'-0"



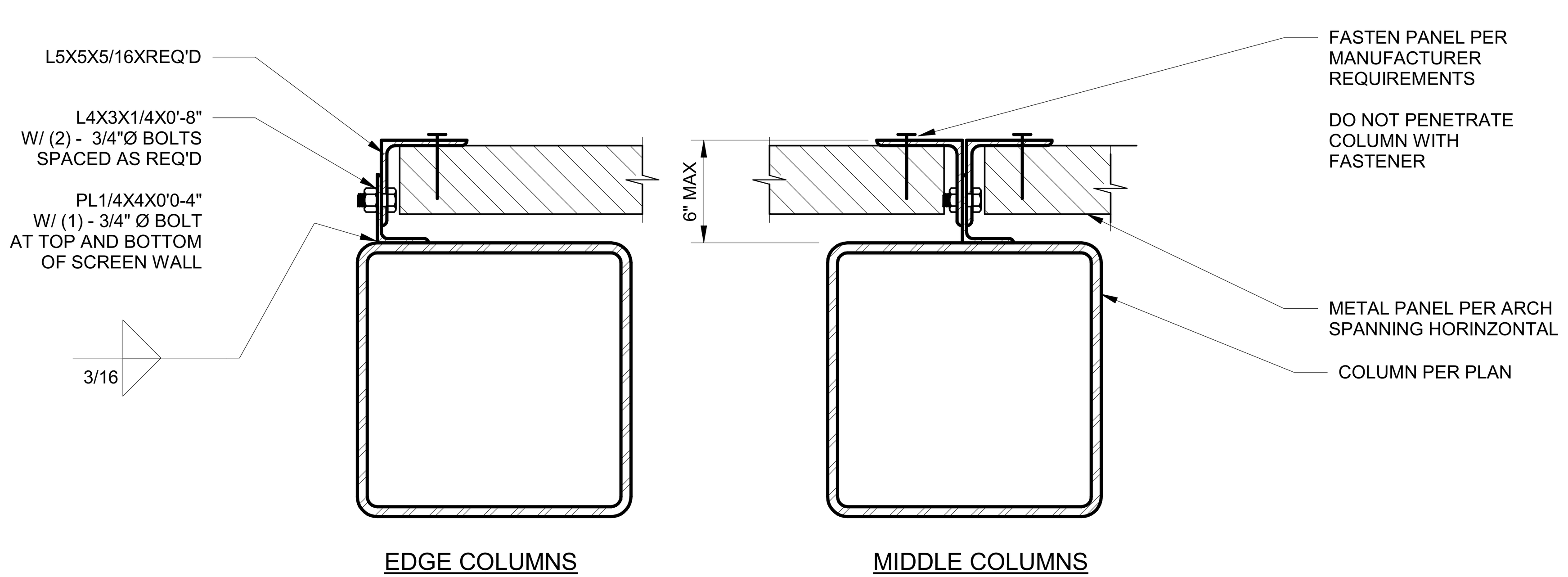
INTERIOR ROOF BEAM PURLIN CONNECTION 3 S513
1 1/2" = 1'-0"



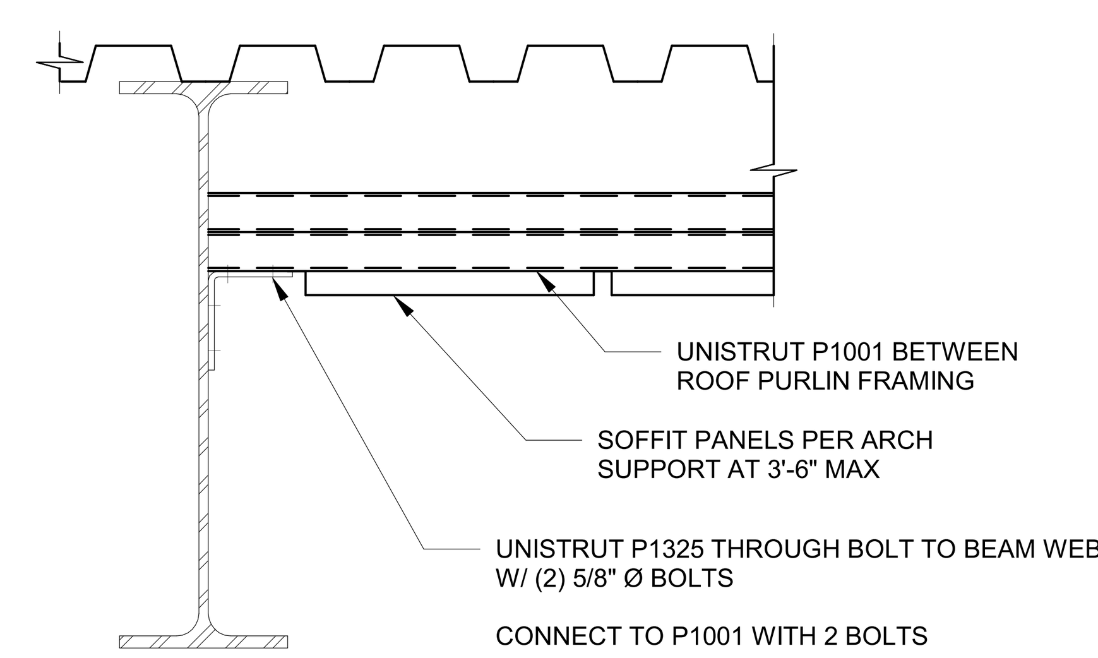
EXTERIOR ROOF BEAM PURLIN CONNECTION 4 S513
1 1/2" = 1'-0"



FALL PROTECTION AT ROOF PURLIN 5 S513
1 1/2" = 1'-0"



SCREEN PANEL ATTACHMENT 6 S513
1 1/2" = 1'-0"



SOFFIT PANEL ATTACHMENT 7 S513
1 1/2" = 1'-0"

3/4/2022 10:35:03 AM D:_Revit\Northrup Wash Canopy - Rvt20_lmyQ9PWM.rvt

PROJECT ARCHITECT:					REGION NO. 10 STATE: WASH
DRAWN BY: LMY					FEDERAL AID PROJECT NO.
REVIEWED BY: LMY					UB PERMIT
REVIEWED BY: MISC					HEDG00000025
					FCR NO:
AS BUILT BY:	8/2/2021	REVISION 0: ISSUED FOR PERMIT	LMY	8/2/2021	DESIGN NO:
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Washington State
Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES - NWR

BID SET

CITY OF BELLEVUE, WA

STEEL FRAMING DETAILS

S513

SHEET OF SHEETS

MECHANICAL GENERAL NOTES

1. DRAWINGS SCALES APPLY TO FULL SIZE SHEET ONLY; FULL SIZE SHEETS ARE 34"x22". USE CAUTION IN OBTAINING DIMENSIONS AND QUANTITIES FROM DRAWINGS THAT ARE NOT THIS FULL SIZE; USE DIMENSIONS CALCULATED FROM DIMENSIONS ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS OVER OTHER METHODS OF OBTAINING DIMENSIONS.
2. SEISMICALLY ANCHOR ALL UNITS & EQUIPMENT TO BUILDING. (UNO). CONTRACTOR IS RESPONSIBLE TO SELECT AND PROVIDE ALL SEISMIC ANCHORING DEVICES FOR ALL MECHANICAL EQUIPMENT, ALL PIPING AND ALL DUCTWORK. CONTRACTOR SHALL SUBMIT DETAILS AND PLANS TO BUILDING INSPECTOR FOR REVIEW AND COMMENT PRIOR TO INSTALLATION.
3. FIXTURE LOCATIONS: VERIFY LOCATION OF PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS BEFORE BEGINNING WORK. ARCHITECTURAL DRAWINGS GOVERN. PLUMBING FIXTURE HEIGHTS SHALL BE AS SHOWN ON ARCHITECTURAL DRAWINGS.
4. PIPE ROUTING: ALL PIPING SHOWN IS SCHEMATIC, CONTRACTOR SHALL PROVIDE ALL OFFSETS/ELBOWS AS REQ'D TO ALLOW ROUTING AROUND STRUCTURE, ELECTRICAL, & OTHER INTERFERENCES. ALL PIPING SHALL BE RUN CONCEALED, UNO.
5. PIPE SIZES: UNSIZED PLUMBING PIPING SHALL MATCH THE SIZE OF THE LARGEST ADJACENT CONNECTING PIPE SIZE SHOWN.

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	W	V	CW	HW	REMARKS	MANUFACTURER AND SERIES NO.	
							FIXTURE	TRIM
P-10A	GROUND HYDRANT	-	-	1-1/4"	-	NON-FREEZE	ZURN Z1365	FLUSH GRADE INSTALLATION, COATED CAST IRON BOX WITH LOCKING LID, T-HANDLE LOCK, 1-1/4" THREADED HOSE CONNECTION

MISCELLANEOUS EQUIPMENT SCHEDULE

SYMBOL	ITEM DESCRIPTION	BASIS OF DESIGN MANUFACTURER AND SERIES NO.	AREA SERVED	EQUIPMENT CAPACITY	ELECTRICAL		REMARKS
					POWER	VOLTS / PH	
ENC-1	INSULATED UTILITY ENCLOSURE W/ HEATER	AQUA-SHIELD BFP4-05	BACKFLOW PREVENTER	102"x28"x54" INSIDE DIMENSION *	1500 WATTS	120/1	2 DOOR PANEL, ALUMINUM CONSTRUCTION, 450 LBS

* VERIFY INSIDE DIMENSION IS ADEQUATE TO ENCLOSE WASH BAY WATER HEADER COMPLETELY.

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	WASTE OR SOIL (W)
	VENT (V)
	COLD WATER (CW)
NPW	NON POTABLE WATER (NPW)
	FLOOR CLEANOUT (FCO)
	ISOLATION VALVE - SEE SPECIFICATIONS FOR TYPE
	CHECK VALVE
	PIPE UP
	PIPE DOWN
	PIPE TEE IN LINE, BRANCH PIPE DOWN
	UNION
	SOLENOID VALVE
	STRAINER W/ BLOWDOWN VALVE
	PRESSURE REDUCING VALVE (PRV)
	PRESSURE GAUGE
2 / M3.1	DETAIL/SECTION IDENTIFICATION NUMBER SHEET ON WHICH DETAIL IS SHOWN

NOTE: FOR DESCRIPTION OF OTHER ABBREVIATIONS SEE SYMBOL LISTING TO THE LEFT, EQUIPMENT/ITEMS SCHEDULES, AND ABBREVIATIONS LISTED IN SPECIFICATIONS

ABBREV.	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
ASSY	ASSEMBLY
BFF	BELOW FINISHED FLOOR
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT/HOUR
BLDG	BUILDING
CAP	CAPACITY
CLG	CEILING
CO	CLEANOUT
CONN	CONNECTION
CONT	CONTINUE, CONTINUATION
CW	COLD WATER
DEG F, °F	DEGREE FAHRENHEIT
DIA, Ø	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EACH
EFF	EFFICIENCY
ELEC	ELECTRICAL, ELECTRIC
EXIST	EXISTING
ETR	EXISTING TO REMAIN
FPM	FEET PER MINUTE
FLEX	FLEXIBLE
FL	FLOOR
FCO	FLOOR CLEAN OUT
FLA	FULL LOAD AMPS
GAL	GALLON
HB	HOSE BIBB
HP	HORSE POWER
INTEGR.	INTEGRAL
IN	INCH
I.E.	INVERT ELEVATION
KW	KILOWATT
L	LINING
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MFR	MANUFACTURER
MBH	THOUSAND BTUH
MID	MIDDLE
MCA	MINIMUM CIRCUIT AMPACITY
MECH	MECHANICAL
MIN	MINIMUM
NO.	NUMBER
NPW	NON POTABLE WATER
NTS	NOT TO SCALE
PH	PHASE
PD	PRESSURE DROP
RLA	RATED LOAD AMPS
REF	REFERENCE
RL	RAIN LEADER
REQ'D	REQUIRED
RPM	REVOLUTIONS PER MINUTE
RM	ROOM
SCO	SURFACE CLEANOUT
S.O.	SCREENED OPENING
SS	STAINLESS STEEL
TEMP	TEMPERATURE
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THROUGH ROOF
V	VOLTS, VOLTAGE, VENT
WC	WATER COLUMN
WCO	WALL CLEAN OUT
W	WASTE
WA	WATT
W/	WITH

BID SET

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1111 Fawcett Ave Suite 100 Tacoma, WA 98402
Phone: (253) 383-3257 Fax: (253) 383-3283
general@hultzbhu.com Job Number: 20-165

PROJECT ARCHITECT: LC					REGION NO.	STATE:	
DRAWN BY: WS					FEDERAL AND PROJECT NO.		
REVIEWED BY:							
PERMIT SUBMITTAL	08.02.21				JOB NO:	a20-099	
BID SET	03.11.22				FCR NO:		
AS-BUILT BY:					DESIGN NO:		
	DATE				CONTRACT NO:		

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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH RETROFIT NPDES - NWR
BID SET

LEGEND & NOTES

M001

OF SHEETS

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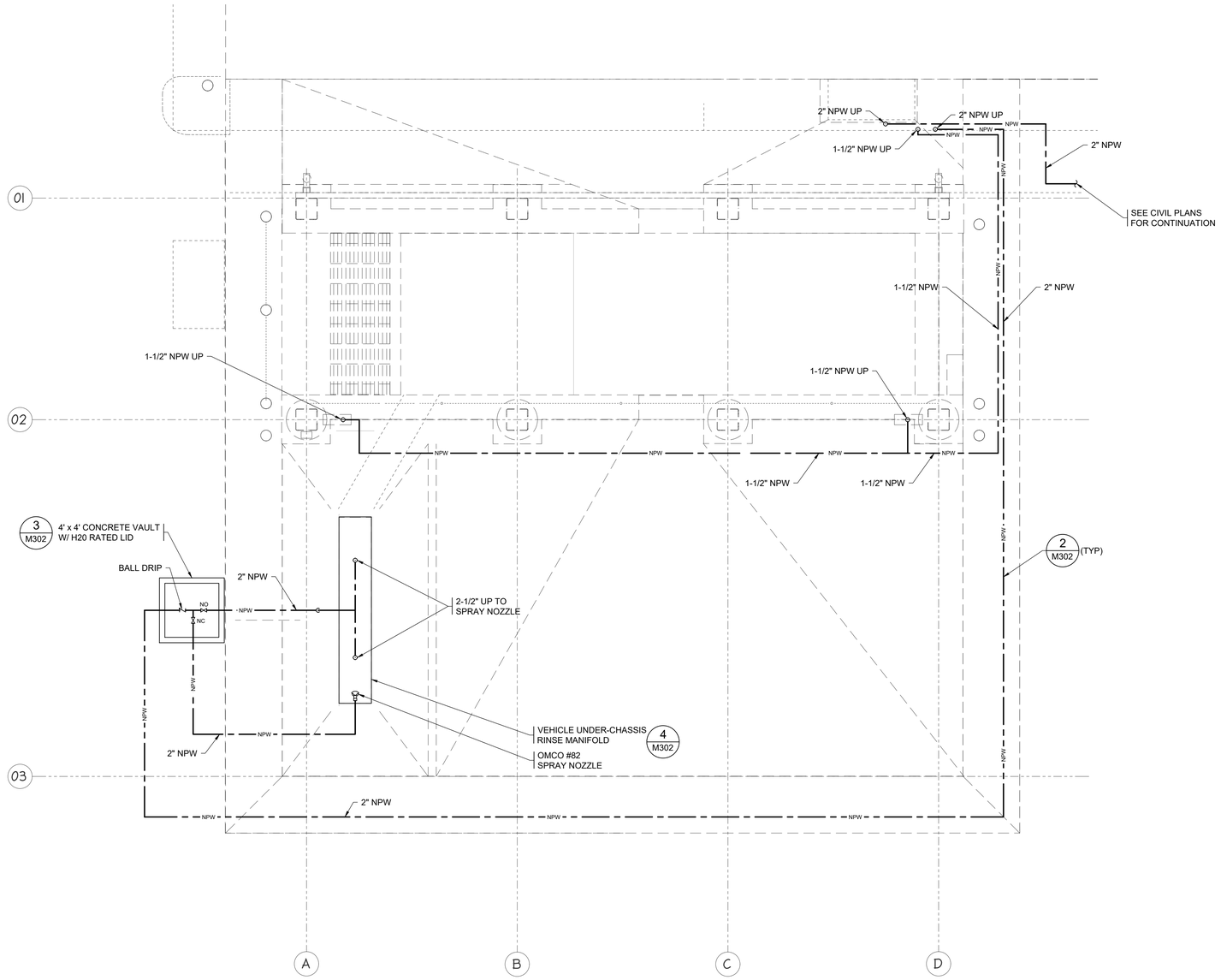
PROJECT: a20-099 - NORTHRUP MAINTANCE FACILIY



FOUNDATION PLAN

1/4" = 1'-0"

NORTH

0' 1' 4' 8'

SCALE: 1/4" = 1'-0"

BID SET

HULTZ BHU engineers inc

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general@hultzbhu.com Job Number: 20-165

PROJECT ARCHITECT: LC					REGION NO.	STATE:
DRAWN BY: WS					FEDERAL AND PROJECT NO.	
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PERMIT SUBMITTAL	08.02.21				JOB NO:	a20-099
BID SET	03.11.22				FCR NO:	
AS-BUILT BY:					DESIGN NO:	
	DATE				CONTRACT NO:	

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NORTHUP PREWASH RETROFIT NPDES - NWR
BID SET

FOUNDATION PLAN

M201

OF SHEETS

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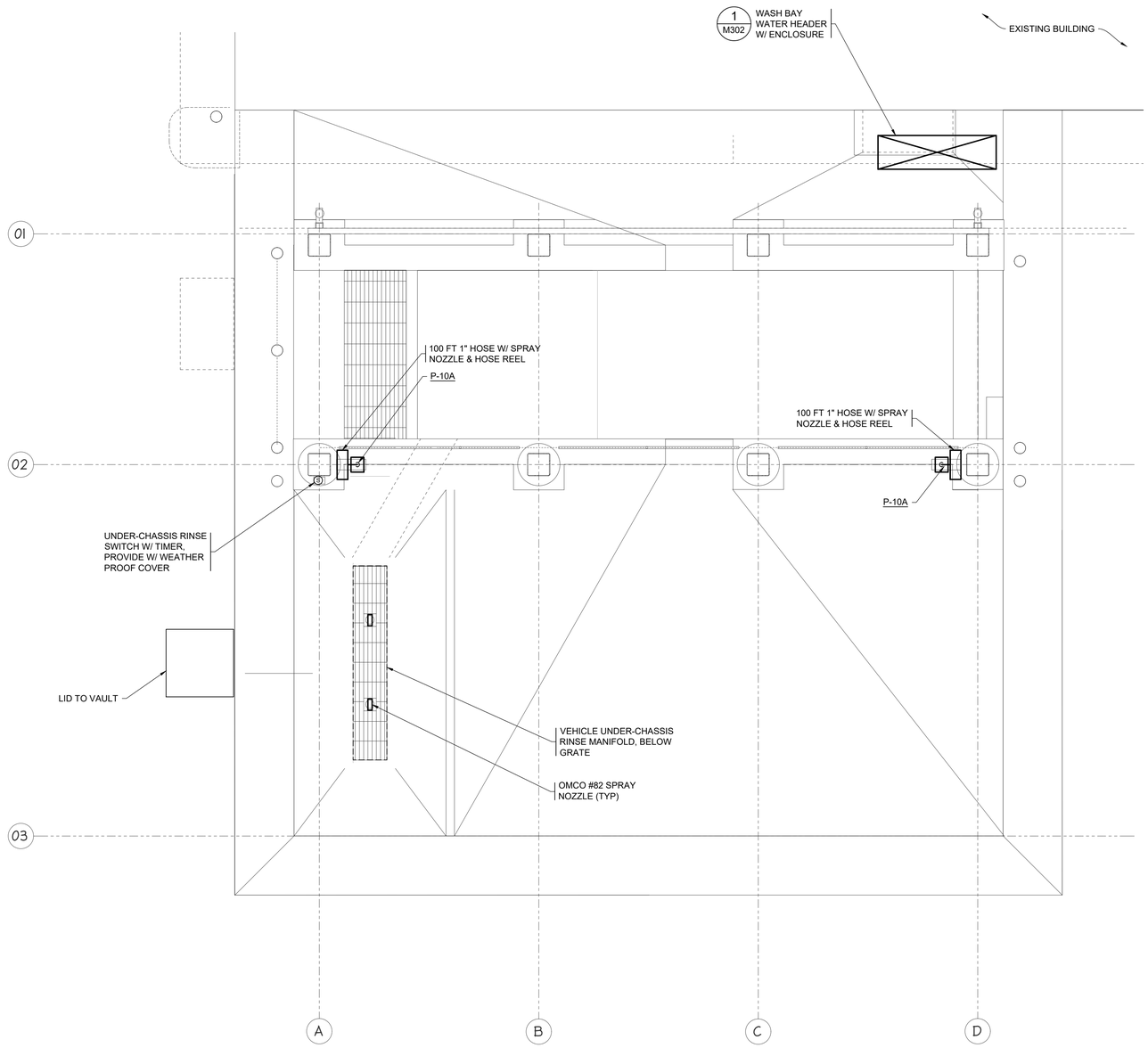
PROJECT: a20-099 - NORTHRUP MAINTANCE FACILITY



PLUMBING PLAN

1/4" = 1'-0"

NORTH

0' 1' 4' 6' 2' 8'

SCALE: 1/4" = 1'-0"

HULTZ BHU engineers inc

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BID SET

PROJECT ARCHITECT: LC					REGION NO.	STATE:
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NORTHUP PREWASH
RETROFIT NPDES - NWR
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PLUMBING PLAN

M301

OF SHEETS

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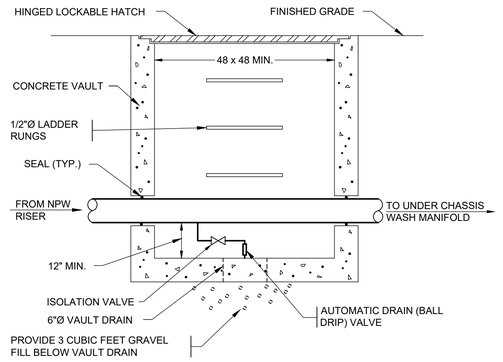
FILE PATH: C:\Users\WSB\Desktop\Revit 2021 Projects\a20-099-Northup Maint Facility Pre-Wash Station r2_WSB.rvt

PROJECT: a20-099 - NORTHRUP MAINTANCE FACILITY

NOTES:

1. VAULT SHALL BE CONSTRUCTED OF MIN. 4000 PSI 28 DAY COMPRESSIVE STRENGTH CONCRETE & SHALL BE RATED FOR AASHO-H20 LOADING. VAULT REINFORCING STEEL SHALL BE DEFORMED STEEL BARS PER ASTM A 615-65 GRADE 40 & WELDED WIRE FABRIC PER ASTM A 82-66 & 155-69.
2. VAULT DEPTH & DIMENSIONS SHALL BE AS REQ'D TO SUIT ITEMS SHOWN & TO PROVIDE MINIMUM CLEARANCES INDICATED.
3. HATCH SHALL BE RATED FOR AASHO-H20 LOADING, SHALL BE DIAMOND PLATE STEEL TYPE, HOT-DIP GALV. AFTER FABRICATION. OPENING SIZE SHALL BE NO LESS THAN 34"x 34" (INSIDE CLEAR) W/ HATCH.

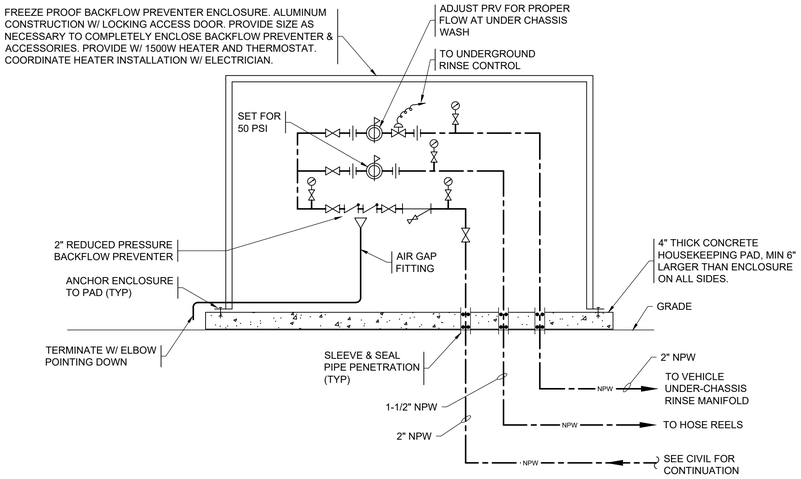


BALL DRIP ASSEMBLY

NTS

3 / M302

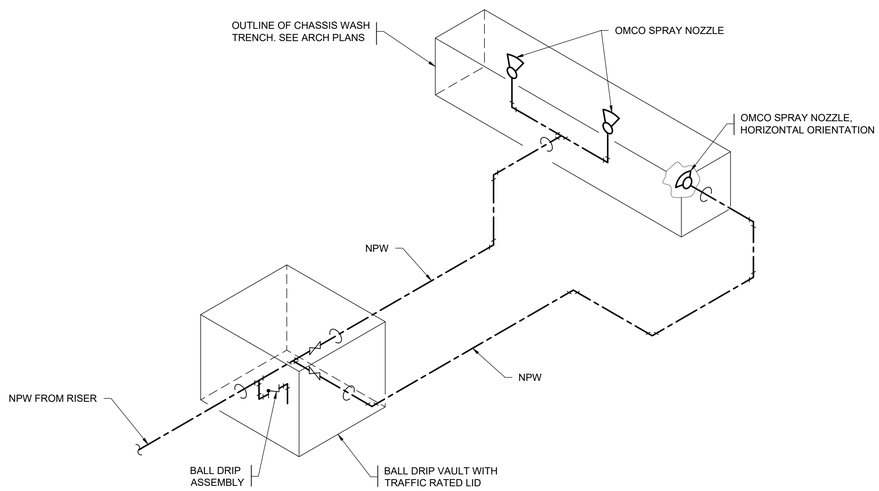
ENC-1: FREEZE PROOF BACKFLOW PREVENTER ENCLOSURE. ALUMINUM CONSTRUCTION W/ LOCKING ACCESS DOOR. PROVIDE SIZE AS NECESSARY TO COMPLETELY ENCLOSE BACKFLOW PREVENTER & ACCESSORIES. PROVIDE W/ 1500W HEATER AND THERMOSTAT. COORDINATE HEATER INSTALLATION W/ ELECTRICIAN.



WASH BAY WATER HEADER

NTS

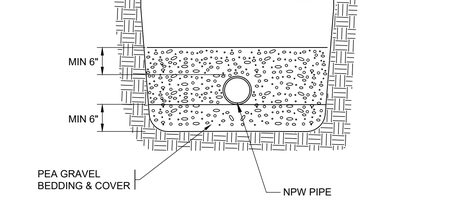
1 / M302



CHASSIS WASH SCHEMATIC

NTS

4 / M302



UTILITY TRENCH & BEDDING

NTS

2 / M302

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Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHUP PREWASH
RETROFIT NPDES - NWR
BID SET

PLUMBING DETAILS

M302

OF SHEETS

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FILE PATH: G:\Users\WSA\Desktop\Revit 2021 Projects\a20-099-Northup Maint Facility Pre-Wash Station r2_WSA.rvt

PROJECT: a20-099 - NORTHRUP MAINTANCE FACILITY

ABBREVIATIONS

(SOME ABBREVIATIONS MAY NOT BE USED ON DRAWINGS)

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A or AMP	AMPERES	MCM, KCM	THOUSAND CIRCULAR MILS
AC	ALTERNATING CURRENT	MDF	MAIN DISTRIBUTION FRAME
A/C	AIR CONDITIONING	MECH	MECHANICAL
AIC	AMPERE INTERRUPTING CAPACITY	MIN	MINIMUM
AL	ALUMINUM	MLO	MAIN LUGS ONLY
ARCH	ARCHITECTURAL	MOP, MOCP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	NIC	NOT IN CONTRACT
AWG	AMERICAN WIRE GAUGE	NTS	NOT TO SCALE
BKR	BREAKER	OC	ON CENTER
BLDG	BUILDING	PA	PUBLIC ADDRESS
C	CONDUIT	PB	PULLBOX
C.O.	CONDUIT ONLY	Ø or PH	PHASE
CB	CIRCUIT BREAKER	PNL	PANEL
CCTV	CLOSED CIRCUIT TELEVISION	PR	PAIR
CFM	CUBIC FEET PER MINUTE	PRI	PRIMARY
CKT	CIRCUIT	PVC	POLYVINYL CHLORIDE
CLG	CEILING	RECPT	RECEPTACLE
CONC	CONCRETE	REQ	REQUIRED
CT	CURRENT TRANSFORMER	RM	ROOM
CU	COPPER	SHT	SHEET
CW	COLD WATER	SP	SINGLE POLE
DC	DIRECT CURRENT	SPD	SURGE PROTECTIVE DEVICE
DIA	DIAMETER	SPDT	SINGLE POLE, DOUBLE THROW
DIV	DIVISION	SPST	SINGLE POLE, SINGLE THROW
DPDT	DOUBLE POLE, DOUBLE THROW	SW	SWITCH
DPST	DOUBLE POLE, SINGLE THROW	SWBD	SWITCHBOARD
DWG	DRAWING	TEL	TELEPHONE
EGC	EQUIPMENT GROUND CONDUCTOR	TV	TELEVISION
ELEC	ELECTRIC	TTB	TELECOMMUNICATIONS TERMINAL BOARD
EMT	ELECTRICAL METALLIC TUBING	TYP	TYPICAL
EXST, (E)	EXISTING	UL	UNDERWRITERS LABORATORY
EV	ELECTRIC VEHICLE	UF	UNDERFLOOR
FA	FIRE ALARM	UG	UNDERGROUND
FC	FOOTCANDLE	V	VOLTS
FLA	FULL LOAD AMPS	VA	VOLT AMPERES
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	VAC	VOLTS ALTERNATING CURRENT
GND	GROUND	VAR	REACTIVE VOLT AMPERES
HP	HORSEPOWER	W	WATTS
IDF	INTERMEDIATE DISTRIBUTION FRAME	WP	WEATHERPROOF
J-BOX	JUNCTION BOX	/W	WITH
KV	KILOVOLTS	W/O	WITHOUT
KVA	KILOVOLT AMPERES	XFER	TRANSFER
KW	KILOWATTS	XFMR	TRANSFORMER
LT	LIGHT		
LTG	LIGHTING		
MAX	MAXIMUM		
MCA	MINIMUM CIRCUIT AMPS		
MCB	MAIN CIRCUIT BREAKER		
MCC	MOTOR CONTROL CENTER		

OUTLET MOUNTING HEIGHTS

(MEASURE TO CENTER OF BOX, UNLESS OTHERWISE INDICATED)

COUNTER HEIGHT (*)	+3 INCHES ABOVE SPLASH	FIRE ALARM	
CASEWORK OUTLETS	AS DIRECTED	MANUAL STATIONS	48 INCHES TO TOP
SWITCHES AND DIMMERS	48 INCHES	SIGNALING DEVICES	80 INCHES TO BOTTOM
RECEPTACLES	18 INCHES	REMOTE ALARM LIGHTS	80 INCHES TO BOTTOM
THERMOSTATS	48 INCHES	REMOTE ANNUNCIATOR	60 INCHES TO BOTTOM
OCCUPANCY SENSORS	12 FEET MAXIMUM	GRAPHIC PLAQUES	60 INCHES TO BOTTOM
DATA (COMPUTER)	18 INCHES	SECURITY	
WALL PHONE	48 INCHES	KEY PAD	48 INCHES TO TOP
TV (TELEVISION)	18 INCHES	CARD READER	48 INCHES
TV WALL MOUNTED	CENTER OF TV BRACKET	CCTV	WITHIN 6 INCHES OF CAMERA MOUNT
SPEAKERS	90 INCHES		
CLOCKS	90 INCHES	CCTV POLE MOUNTED	16 FEET
CLOCK/SPEAKER	90 INCHES, GYM OR COMMONS - 120"		
PROJECTOR	ABOVE WHITEBOARD, TO BE COORDINATED		

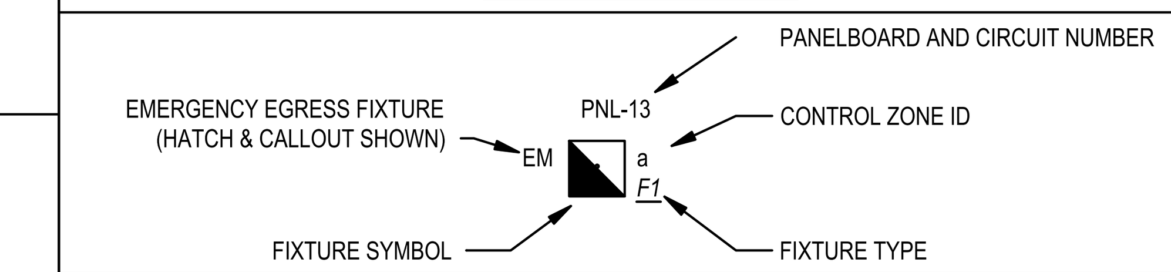
ELECTRICAL LEGEND

(SOME SYMBOLS MAY NOT BE USED ON DRAWINGS)

SYMBOL	DESCRIPTION
	DISTRIBUTION
	PANELBOARD - SURFACE
	PANELBOARD - EXISTING (SURFACE PANEL SHOWN)
	SWITCHBOARD OR MCC (DRAWN TO SCALE)
	DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	UNDERGROUND POWER VAULT
	DRY TYPE TRANSFORMER
	GENERAL
#	BUBBLE NOTE TAG SYMBOL: # - IDENTIFYING NUMBER
	SCHEDULED EQUIPMENT CONNECTION (INCLUDE ALL WIRING, DISCONNECTING MEANS, CONTROL AND OTHER REQUIREMENTS SCHEDULED)
# / A	DETAIL SYMBOL: # - IDENTIFYING NUMBER A - SHEET WHERE DETAIL SHOWN
#	REVISION CALLOUT
#	FLAG NOTE
#	SCHEDULED CONDUIT CALLOUT
	LIGHTING
	LUMINAIRE (TO SCALE ON DRAWINGS)
	EMERGENCY FIXTURE - TWIN HEAD
	COMBINATION EXIT SIGN AND TWIN HEAD EMERGENCY LIGHTING UNIT
E	LIGHT FIXTURE ON EMERGENCY LIGHTING CIRCUIT
a,b	INDICATES CONTROL ZONE
	POLE MOUNTED LIGHT
XX	INDICATES LUMINAIRE TYPE
	LINE TYPES
	EXISTING WORK
	NEW WORK
	WIRING CONCEALED IN CEILING OR WALL
	WIRING AND CONDUIT BELOW GRADE
	WIRING EXPOSED
	WIRING HOMERUN
	CONDUIT UP, DOWN
	FLEXIBLE WIRING CONNECTION
OHP	OVERHEAD POWER

SYMBOL	DESCRIPTION
	POWER
	DUPLEX RECEPTACLE (NEMA 5-20R) SUBSCRIPT: IG ISOLATED GROUND DF CHILLED WATER FOUNTAIN REF REFRIGERATOR COP COPIER P PEDESTAL WP WEATHERPROOF C CEILING DW DISHWASHER P WALL MOUNT PROJECTOR TV VIDEO DISPLAY OUTLET. REFER TO ARCHITECTURAL DETAILS FOR MOUNTING HEIGHT
	ALL RECEPTACLES ARE TAMPER RESISTANT
	FOURPLEX RECEPTACLE (NEMA 5-20R)
	DUPLEX RECEPTACLE CONTROLLED BY OCCUPANCY SENSOR OR TIME SWITCH
	GFCI DUPLEX RECEPTACLE (NEMA 5-20R)
*	ASTERISK INDICATES COUNTER HEIGHT OUTLET (DUPLEX RECEPTACLE SHOWN)
R	RANGE RECEPTACLE (NEMA 14-50R)
D	DRYER RECEPTACLE (NEMA 14-30R)
	SPECIAL PURPOSE OUTLET (AS NOTED)
	RECESSED FLOOR BOX FOR POWER & SIGNAL
	DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
J	JUNCTION BOX
	MOTOR CONNECTION
	EQUIPMENT CONNECTION SUBSCRIPT: WH WATER HEATER HD HAND DRYER WC WATER COOLER
	PUSHBUTTON OPERATOR STATION (START/STOP UNLESS OTHERWISE NOTED)

LIGHT FIXTURE CALLOUTS



SYMBOL	LIGHTING CONTROL
	PHOTOCELL, EXTERIOR
S	SINGLE POLE TOGGLE SWITCH
$	DIGITAL SWITCH STATION
$\$_{WP}$, S_3	SWITCH SUBSCRIPTS: 2 DOUBLE POLE 3 THREE WAY 4 FOUR WAY D DIMMER EP EXPLOSION PROOF K KEY OPERATED LV LOW VOLTAGE LVM LOW VOLTAGE MASTER M MANUAL MOTOR STARTER W/OVERLOADS MC MOMENTARY CONTACT P SWITCH W/PILOT LIGHT T TIMER WP WEATHERPROOF a, b, c MULTIGANG SWITCH STATION
	DAYLIGHT SENSOR - DUAL ZONE
OS	OCCUPANCY SENSOR
ETR	UL924 EMERGENCY TRANSFER RELAY

GENERAL ELECTRICAL NOTES:

1. SEE ARCHITECTURAL PLANS FOR LOCATION OF FIRE RATED CONSTRUCTION.
2. BRANCH CIRCUIT NOTES:
   A. VERIFY BRANCH CIRCUIT WIRE COUNT BEFORE PULLING CONDUCTORS. PROVIDE REQUIRED CONDUCTORS TO EACH OUTLET AND DEVICE FOR PHASE, NEUTRAL AND EQUIPMENT GROUND BASED ON CIRCUIT DESIGNATIONS SHOWN AND AS OTHERWISE INDICATED ON PLANS OR NOTE BELOW.
   B. FOR SWITCHED OUTLETS, PROVIDE ADDITIONAL CONDUCTOR COUNT REQUIRED FOR SWITCH LEGS TO ACCOMMODATE SWITCH CONTROL INDICATED. MAINTAIN UNSWITCHED LEG IN LIGHTING BRANCH CIRCUITS TO EXIT, EMERGENCY, AND NIGHT LIGHTING SHOWN.
   C. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE FOR OUTDOOR AND EXTERIOR BUILDING LIGHTING SHALL BE #10 AWG.
   D. PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR BRANCH CIRCUITS SERVING RECEPTACLE OUTLETS UNLESS OTHERWISE INDICATED.
3. MINIMUM CONDUIT SIZE FOR HOMERUNS AND FOR CONDUIT INSTALLED BELOW GRADE OUTDOORS SHALL BE 3/4 INCH.
4. REFER TO ARCHITECTURAL PLANS FOR LIGHT FIXTURE LOCATIONS AND FOR MOUNTING HEIGHT OF SUSPENDED AND WALL MOUNTED LIGHT FIXTURES. REFER TO REFLECTED CEILING PLANS, INTERIOR ELEVATIONS, EXTERIOR ELEVATIONS, ROOM SECTIONS, AND DETAILS SHOWN ON ARCHITECTURAL CONTRACT DOCUMENTS PRIOR TO ROUGH-IN. REPORT CONFLICTS TO ARCHITECT/ENGINEER FOR RESOLUTION.
5. REFER TO ARCHITECTURAL ELEVATIONS FOR LOCATION AND MOUNTING HEIGHT OF WIRING DEVICES. REPORT CONFLICTS TO ARCHITECT/ENGINEER FOR RESOLUTION.
6. VERIFY EXACT LOCATION OF FLOOR BOXES AND OUTLETS LOCATED IN KNEE SPACES AND CASEWORK. OBTAIN ARCHITECT APPROVAL PRIOR TO ROUGH-IN.
7. VERIFY BACK BOX REQUIREMENTS OF EQUIPMENT FURNISHED UNDER OTHER THAN DIVISION 26, 27 OR 28 SECTIONS AND EQUIPMENT FURNISHED BY OWNER.

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	DATE			
PROJECT ARCHITECT: LC	05/14/2021	30% PROGRESS SET		
DRAWN BY: HBHU	06/18/2021	60% PROGRESS SET		
REVIEWED BY:	08/02/2021	PERMIT SET		
REVIEWED BY:	03/11/2022	BID SET		
AS-BUILT BY:				

REGION NO.	STATE:
FEDERAL AND PROJECT NO.	
JOB NO:	a20-001
FCR NO:	
DESIGN NO:	
CONTRACT NO:	

C. THOMAS URQUHART — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
SIGNED 3-11-2022

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NORTHRUP PREWASH RETROFIT NPDES - NWR
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ABBREVIATIONS, LEGEND & GENERAL NOTES

E001

OF

SHEETS

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

NAME	DESCRIPTION	LOCATION	MAXIMUM RATINGS					(CU) FEEDER	CIRCUIT#	DISCONNECT		REMARKS
			KVA	FLA	MCA	MOCP	VOLT/PH	#12 EACH PHASE, NEUTRAL, PLUS GROUND		BY	DESCRIPTION	
ENC-1	AQUA-SHIELD BFPA-05	HEADER ENCLOSURE	1.50	12.5	15.6	20	120 1		4A-16	●	GFCI 20-5R	
			1.50									

EQUIPMENT CONNECTION SCHEDULE NOTES:

1. VERIFY VOLTAGE, PHASE, FLA/MCA OF EACH CONNECTION WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. NOTIFY ARCHITECT/ENGINEER WHEN SCHEDULED SUPPLY WILL NOT MEET NEC REQUIREMENTS.

2. OUTLETS, DISCONNECTS, CONTROLLERS, AND EQUIPMENT CONNECTIONS FOR ROOF TOP AND OTHER OUTDOOR EQUIPMENT SHALL BE WEATHER PROOF.

3. LOCATION OF OUTLETS, DISCONNECTS, CONTROL DEVICES, AND EQUIPMENT CONNECTIONS ARE DIAGRAMMATIC AND TO BE LOCATED IN FIELD BY THE CONTRACTOR AS APPROVED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON PLANS, INSTALL SCHEDULED DISCONNECTS AND CONTROL DEVICES IN SIGHT OF EQUIPMENT. ARRANGE WIRING AND EQUIPMENT TO AVOID INTERFERENCE WITH OTHER WORK AND TO MAXIMIZE ACCESSIBILITY FOR MAINTENANCE AND REPAIRS.

4. COORDINATE WITH THE OTHER INSTALLING CONTRACTORS TO ENSURE NEC REQUIRED ACCESS TO DISCONNECTS IS PROVIDED FOR EACH PIECE OF EQUIPMENT.

6. WIRING BETWEEN EQUIPMENT DISCONNECT AND POINT OF CONNECTION SHALL COMPLY WITH NEC BASED ON EQUIPMENT NAMEPLATE RATING EXCEPT MINIMUM BRANCH CIRCUIT RATING SHALL BE 20 AMPERES.

7. SIZE OF DISCONNECT SWITCH AND MOTOR STARTER SHALL BE SIZED TO COMPLY WITH NEC REQUIREMENTS. WHERE INDICATED MOTOR CONTROL IS NOT LOCATED IN SIGHT OF MOTOR AS DEFINED BY NEC, PROVIDE ADDITIONAL DISCONNECTING MEANS TO COMPLY WITH NEC 430.102.

8. WIRING SIZES ARE BASED ON 60 DEGREE C. FOR AMPACITIES 100 AMPERES AND LESS. FOR FEEDERS LESS THAN 100 FEET IN LENGTH, CONDUCTOR SIZES MAY BE SELECTED BASED ON 75 DEGREE C. WHERE EQUIPMENT INSTALLED IS LABELED FOR 75 DEGREE C. WIRING.

9. SCHEDULE LEGEND:
- ● = FURNISH AND INSTALL NEW UNDER DIVISION 26
- O = INSTALL UNDER DIVISION 26; FURNISHED WITH EQUIPMENT OR BY OTHERS.
- X = FURNISH AND INSTALL BY OTHERS (NOT DIVISION 26)
- * = EXISTING, RELOCATED EQUIPMENT

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	LAMP	VOLTAGE	INPUT WATTS	BALLAST/ DRIVER	REMARKS
SM1	MID BAY SURFACE MOUNT LED FIXTURE, DIE-CAST ALUMINUM HOUSING, HIGH OUTPUT, 3000K	LEDLUMINA BS400LED SERIES	LED 3000K 6880 LUMENS	120	60	0-10V	WET LOCATION RATED
WM1	RECTANGULAR SHAPED LED FLOODLIGHT, TRUNNION MOUNT, BRONZE FINISH, 3000K	RAB FFLED SERIES	LED 3000K 5518 LUMENS	120	39		WET LOCATION RATED
WM2	COMPACT LED FIXTURE DIE-CAST ALUMINUM HOUSING WITH POWDER COAT FINISH, INTEGRAL DRIVER, TYPE3 DISTRIBUTION, WALL MOUNT	HUBBEL LNC2 SERIES	LED 3000K 3100 LUMENS	120	30		WET LOCATION RATED

LUMINAIRE SCHEDULE NOTES:

1. LED LUMENS ARE BASED ON TOTAL ILLUMINATION OUTPUT OF THE LUMINAIRE UNLESS OTHERWISE INDICATED.
2. VERIFY STEM, CHAIN, OR CABLE LENGTH WITH FIXTURE VENDOR AS REQUIRED TO ACCOMMODATE THE INDICATED MOUNTING HEIGHT MEASURED TO BOTTOM OF FIXTURE.
3. LED DRIVERS FOR LOW VOLTAGE DIMMING SHALL BE 0-10 VOLTS [DIGITAL SIGNAL DIMMING INTERFACE TYPE] UNLESS OTHERWIS INDICATED.
4. LOW VOLTAGE DIMMING DRIVERS FOR LUMINAIRES THAT HAVE DAYLIGHT RESPONSIVE CONTROL SHALL DIM TO COMPLETELY OFF.
5. LED DRIVERS FOR LINE VOLTAGE DIMMING SHALL BE REVERSE PHASE ELECTRONIC LOW VOLTAGE (ELV) UNLESS OTHERWISE APPROVED BY THE ARCHITECT/ENGINEER.

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BID SET 3-11-2022

PROJECT ARCHITECT: LC	05/14/2021	30% PROGRESS SET			REGION NO. / STATE:
DRAWN BY: HBHU	06/18/2021	60% PROGRESS SET			FEDERAL AND PROJECT NO.
REVIEWED BY:	08/02/2021	PERMIT SET			
REVIEWED BY:	03/11/2022	BID SET			
					JOB NO: a20-001
					FCR NO:
AS-BUILT BY:					DESIGN NO:
	DATE				CONTRACT NO:

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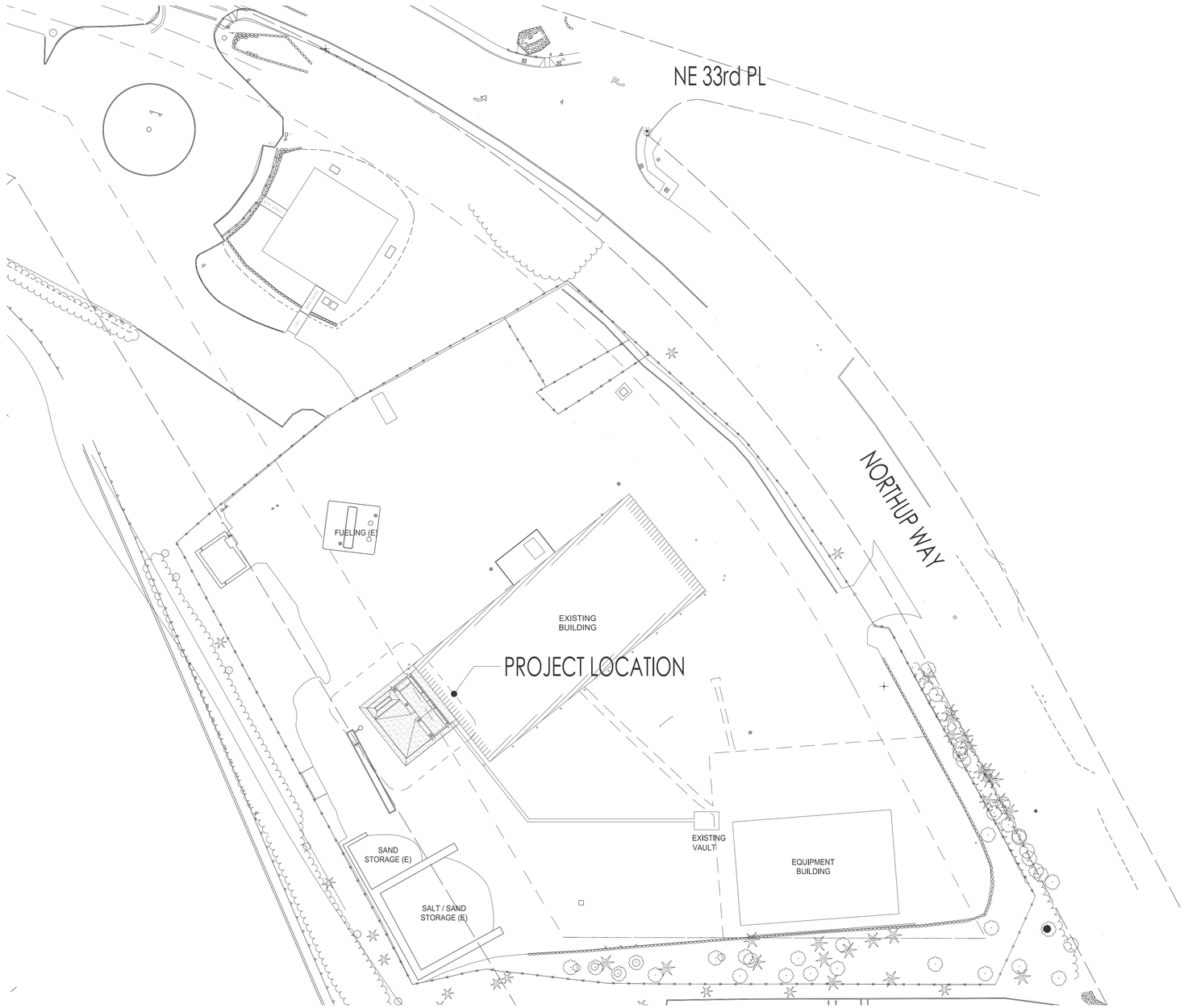
PERMIT SET

ELECTRICAL SCHEDULES

E002

OF

SHEETS



NORTH

ELECTRICAL SITE PLAN

10' 40'
0' 20' 80'

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ELECTRICAL SITE PLAN

E101

OF SHEETS

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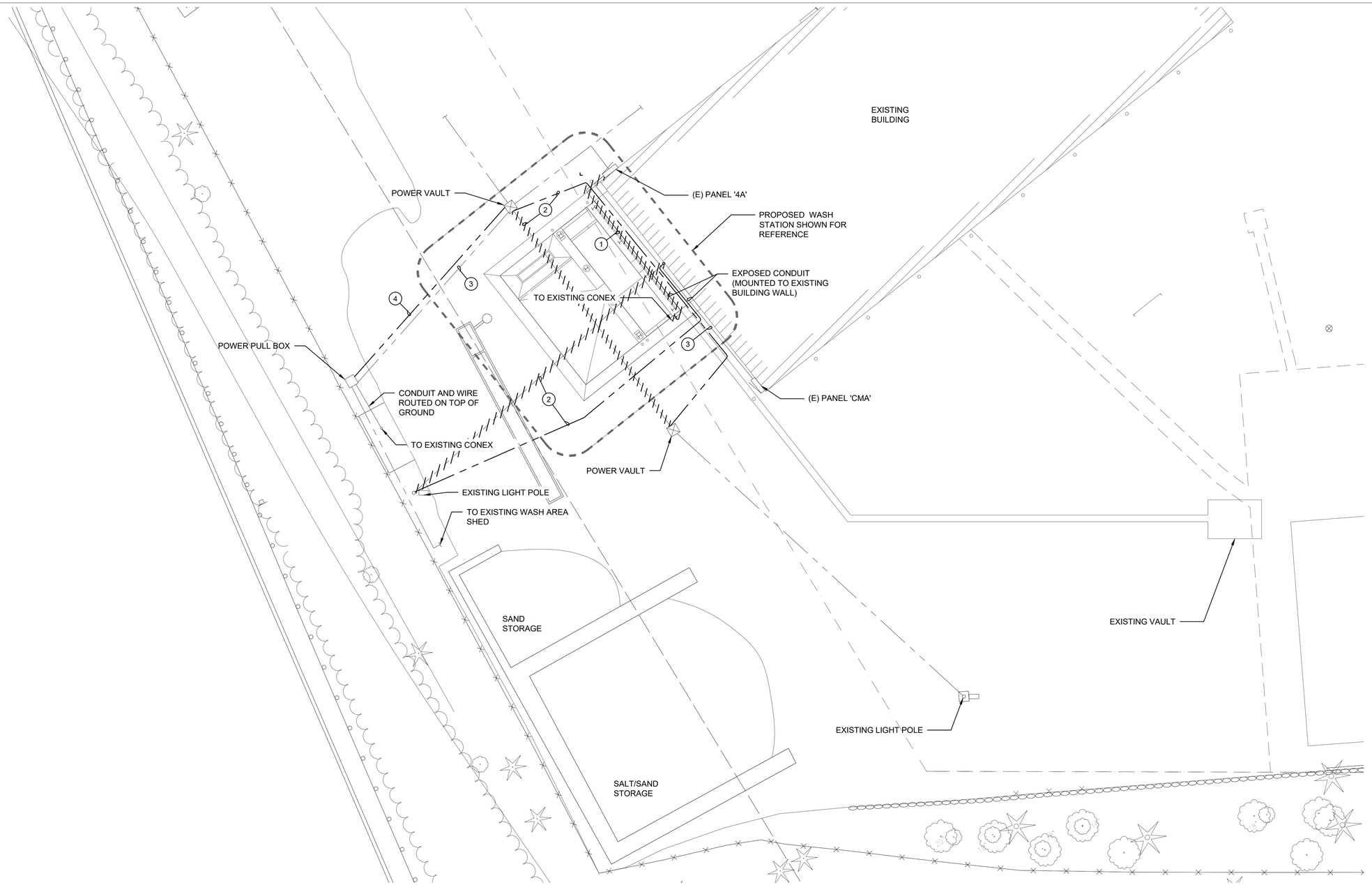

GENERAL NOTES:

1. SEE ELECTRICAL NOTES ON SHEET E001.

PLAN NOTES:

1. CONDUIT AND WIRING FOR EXISTING CONEX TO BE REMOVED BACK TO PANEL 4A, CIRCUIT BREAKER 9 AND 11.
2. CONDUIT AND WIRING TO BE RELOCATED AS NOT TO INTERFERE WITH CIVIL WORK BEING DONE IN PROJECT AREA. EXTEND CIRCUIT WIRING FROM NEAREST DEVICE OR TERMINATION POINT AS REQUIRED. FOR BIDDING PURPOSES ASSUME 3/4" CONDUIT WITH THREE (3) 10 AWG WIRES WITH ONE (1) 10 AWG GROUND.
3. CONDUIT AND WIRING TO REMAIN IN PLACE.
4. SUPPLY AND INSTALL NEW 1" CONDUIT AND (2) #6 WIRE WITH #8 GROUND TO FROM PANEL 4A BREAKER 9, 11 TO EXISTING ELECTRICAL PULL BOX. COIL 50 FT OF WIRE AND TERMINATE WITH WIRE NUT AND TAPE IN PULL BOX FOR FUTURE USE.

NORTH

ELECTRICAL DEMOLITION SITE PLAN

0' 4' 8' 16' 32'

BID SET 3-11-2022

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PROJECT ARCHITECT: LC	05/14/2021	30% PROGRESS SET			REGION NO.	STATE:
DRAWN BY: HBHU	06/18/2021	60% PROGRESS SET			FEDERAL AND PROJECT NO.	
REVIEWED BY:	08/02/2021	PERMIT SET				
REVIEWED BY:	03/11/2022	BID SET				
					JOB NO:	a20-001
					FCR NO:	
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	DATE				CONTRACT NO:	

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NORTHRUP PREWASH RETROFIT NPDES - NWR
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ELECTRICAL DEMOLITION SITE PLAN

E102

OF SHEETS

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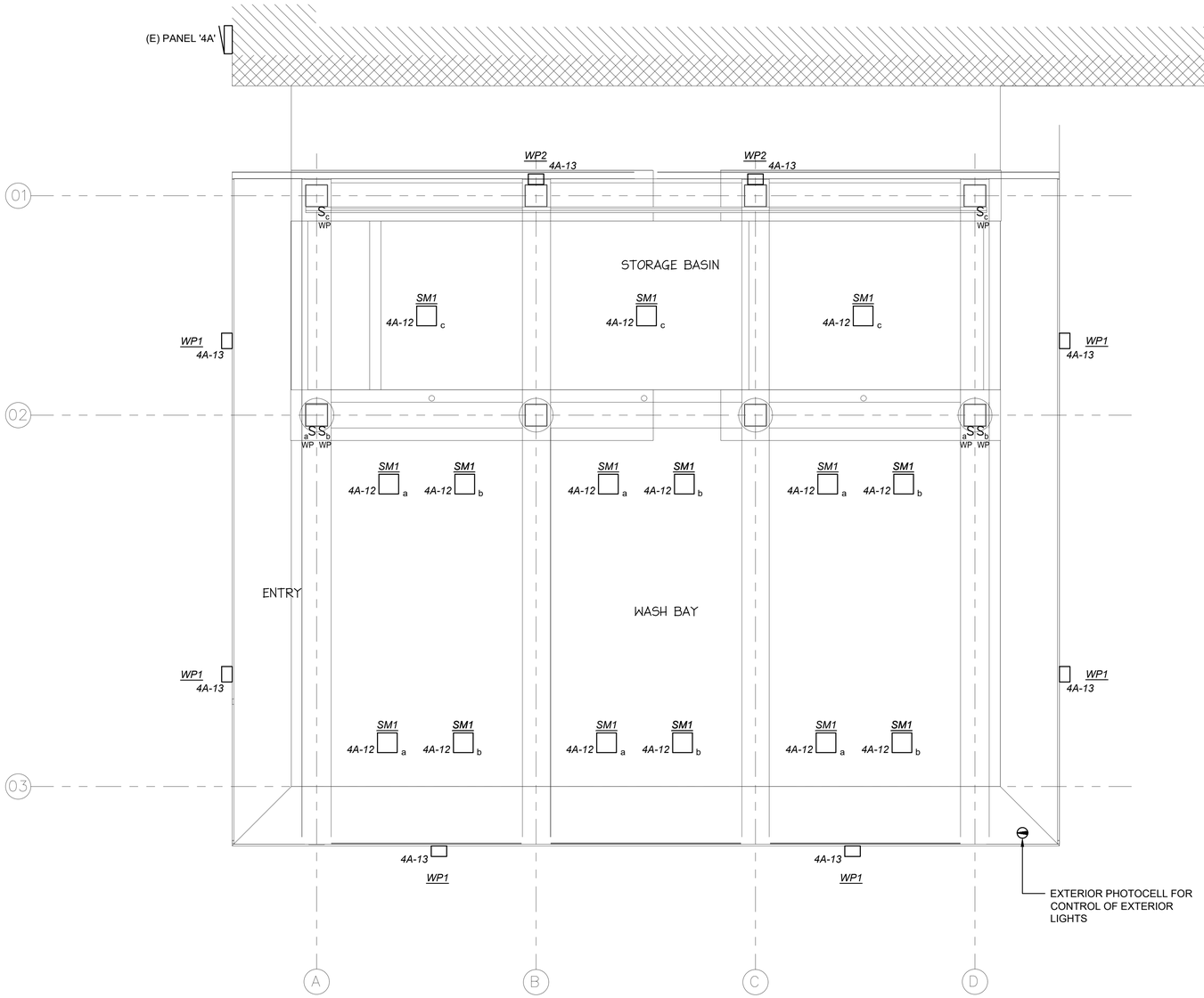
DWG PATH=I:\2020 JOBS\20-165\DRAWINGS\ADP\ELEC\20-165_E102 - DEMOLITION SITE PLAN.DWG

GENERAL NOTES:

1. SEE ELECTRICAL NOTES ON SHEET E001.



NORTH

LIGHTING PLAN

1' 4'
0' 2' 8'

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DRAWN BY: HBHU	06/18/2021	60% PROGRESS SET			FEDERAL AND PROJECT NO.	
REVIEWED BY:	08/02/2021	PERMIT SET				
REVIEWED BY:	03/11/2022	BID SET				
					JOB NO:	a20-001
					FCR NO:	
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	DATE				CONTRACT NO:	

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NORTHRUP PREWASH RETROFIT NPDES - NWR
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LIGHTING PLANS

E201

OF SHEETS

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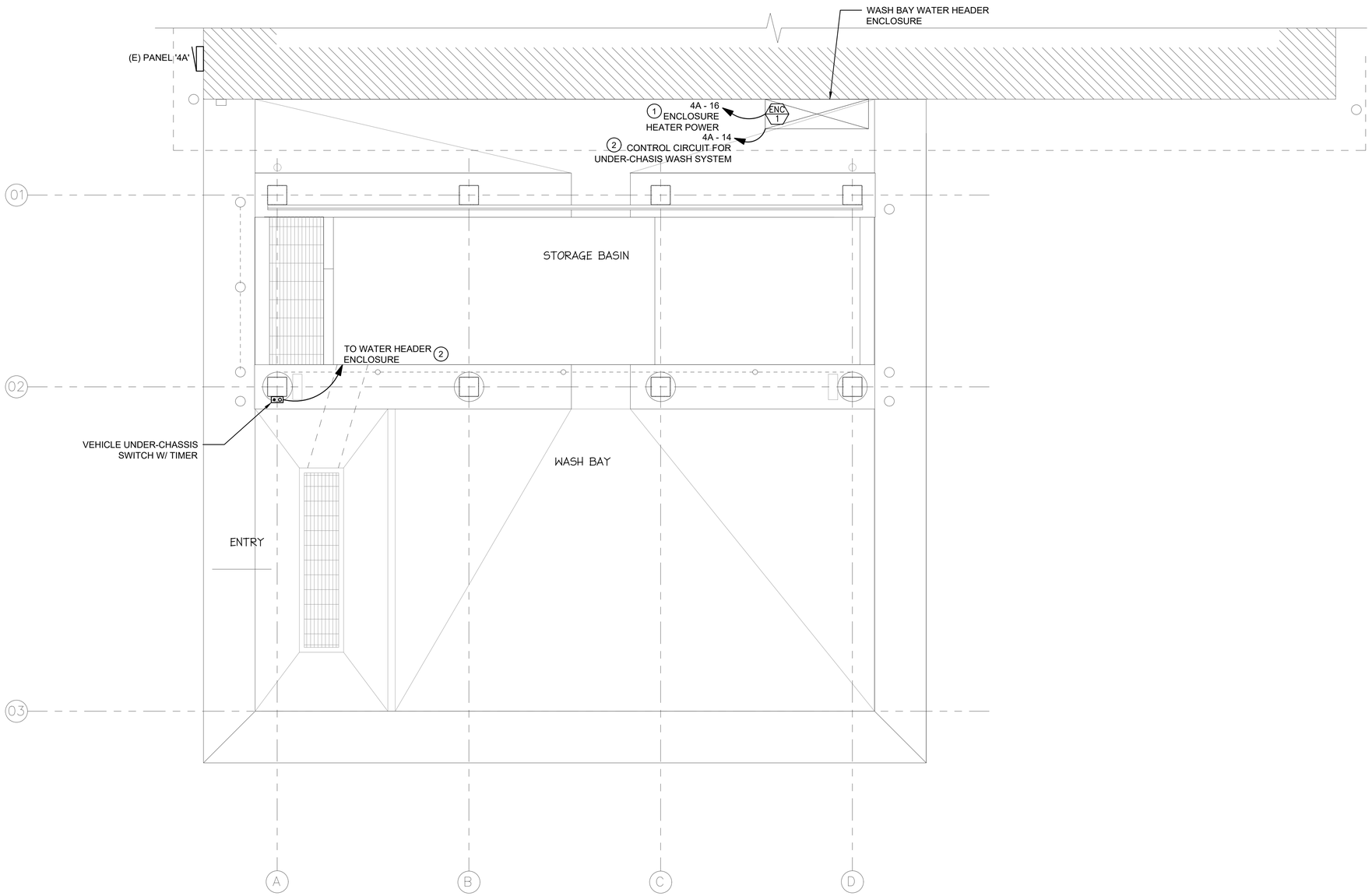
GENERAL NOTES:

1. SEE ELECTRICAL NOTES ON SHEET E001.

PLAN NOTES:

(1) PROVIDE GFCI 20-5R WITH WEATHERPROOF COVER, CONDUIT AND WIRING FOR WASH BAY WATER HEADER ENCLOSURE HEATER.

(2) PROVIDE CONDUIT AND WIRING FOR UNDER CHASSIS WASH SYSTEM LOCATED IN HEADER ENCLOSURE AND REMOTE SWITCH WITH TIMER.



NORTH

POWER PLAN

1' 4' 0' 2' 8'

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NORTHRUP PREWASH RETROFIT NPDES - NWR
PERMIT SET

POWER PLAN

E301

OF SHEETS

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EXISTING — **SINGLE PHASE PANEL SCHEDULE**

4A(EXISTING)

VOLTAGE: 208/120 3W — RATING: 100 A — MAIN: LUG

GRID

ENCLOSURE	ACCESSORIES	AIC ASSEMBLY
SECTION 1 OF1	FLUSH	ISOLATED GROUND	SERVICE RATED
LOCATION:	X SURFACE	SPD	X SERIES RATED
	X NEMA TYPE 1	200% NEUTRAL	10K
	NEMA TYPE 3R	FEED THRU LUGS	25K
	NEMA TYPE 12	DOUBLE LUGS	42K

DESCRIPTION	*	VA	BKR	CKT	A		C	CKT	BKR	VA	*	DESCRIPTION
Washdown Shed		750	20/2	1	3246			2	30/2	2496		CMA Panel
-		750		3			3246	4		2496		-
Pole Light		250	20/2	5	500			6	20/1	250		Flare Storage
-		250		7			750	8	20/2	500		Boat Shed
Conex & Storage Shed		2500	50/2	9	3000			10		500		-
		2500		11			2500	12				SPACE
SPACE				13	0			14				SPACE
SPACE				15			0	16				SPACE
BREAKER CODE: **A**=AFCI, **G**=GFCI, **N**=SWITCHED NEUTRAL, **S**=S		6746					6496	VA 4A(EXISTING)				
		56.2					54.1	AMPS PHASE L-N				

	KVA			KVA
LIGHTING	0.5	X	125%	0.6
RECEPTACLES		X	100%	
RECEPTACLES OVER 10K		X	50%	
MOTORS		X	100%	
LARGEST MOTOR		X	125%	
KITCHEN		X	100%	
NONCOINCIDENT		X	0%	
REMAINDER	12.7	X	100%	12.7

TOTAL LOAD	KVA	AMPS
CONNECTED	**13.2**	**63.7**
CALCULATED	**13.4**	**64.3**

REMARKS
FED FROM MAIN DISTRIBUITION PANEL BOARD, PANEL 4 CIR 17,19

LIGHT LINE WEIGHT EQUALS EXISTING
HEAVY LINE WEIGHT EQUALS NEW

REVISED — **SINGLE PHASE PANEL SCHEDULE**

4A(REVISED)

VOLTAGE: 208/120 3W — RATING: 100 A — MAIN: LUG

GRID

ENCLOSURE	ACCESSORIES	AIC ASSEMBLY
SECTION 1 OF1	FLUSH	ISOLATED GROUND	SERVICE RATED
LOCATION:	X SURFACE	SPD	X SERIES RATED
	X NEMA TYPE 1	200% NEUTRAL	10K
	NEMA TYPE 3R	FEED THRU LUGS	25K
	NEMA TYPE 12	DOUBLE LUGS	42K

DESCRIPTION	*	VA	BKR	CKT	A		C	CKT	BKR	VA	*	DESCRIPTION
Washdown Shed		750	20/2	1	3246			2	30/2	2496		CMA Panel
-		750		3			3246	4		2496		-
Pole Light		250	20/2	5	500			6	20/1	250		Flare Storage
-		250		7			750	8	20/2	500		Boat Shed
Conex & Storage Shed		2500	50/2	9	3000			10		500		-
-		2500		11			3270	12	**20/1***	**770**		**Prewash - Interior Lights**
Prewash - Exterior Lights		**300**	**20/1***	13	400			14	**20/1***	**100**		**Prewash - Controls**
SPACE				15			1500	16	**20/1***	**1500**		**Prewash - Heater**
BREAKER CODE: **A**=AFCI, **G**=GFCI, **N**=SWITCHED NEUTRAL, **S**=S		7146					8766	VA 4A(REVISED)				
		59.6					73.1	AMPS PHASE L-N				

	KVA			KVA
LIGHTING	1.6	X	125%	2.0
RECEPTACLES		X	100%	
RECEPTACLES OVER 10K		X	50%	
MOTORS		X	100%	
LARGEST MOTOR		X	125%	
KITCHEN		X	100%	
NONCOINCIDENT		X	0%	
REMAINDER	14.3	X	100%	14.3

TOTAL LOAD	KVA	AMPS
CONNECTED	**15.9**	**76.5**
CALCULATED	**16.3**	**78.4**

REMARKS:
FED FROM MAIN DISTRIBUITION PANEL BOARD, PANEL 4 CIR 17,19
* **INSTALL NEW BREAKER**

LIGHT LINE WEIGHT EQUALS EXISTING
HEAVY LINE WEIGHT EQUALS NEW

FEEDER SCHEDULE
(BASED ON CU CONDUCTORS)

CALLOUT X-Y-Z

X = NOMINAL CIRCUIT AMPACITY
EG. 225 = 225 AMPERES

Y = CONFIGURATION CODE
1N = 1W + NEUT
1 = 1PH 2W
2 = 1PH 3W
3 = 3PH 3W
4 = 3PH 4W

Z = INDICATES IF GROUND CONDUCTOR(S) ARE INCLUDED
G = EQUIPMENT GROUND
IG = ISOLATED GROUND
GT = SEPARATELY DERIVED GOUND

CALLOUT	DESCRIPTION	REMARKS
30-2-G	3/4"C-3#10 +#10G	
100-2-G	2#C-3#1 +#6G	
760-4	(2) 3.5"C-4#500 IN PARALLEL	
760-4-G	(2) 3.5" RGS-4#500 IN PARALLEL	

REVISED LOAD SUMMARY - 4A
100A 208/120V, 1PH, 3W

	KVA	AMPS	NOTES
PANEL 4A			
EXISTING	13.4	64.3	
LOAD ADDED			
LTG ADDED (125%)	1.3	6.4	
WASH CONTROLS	0.1	0.5	
1.5KW HEATER	1.5	7.2	
TOTAL LOAD ADDED	2.9	14.1	
TOTAL OVERALL LOAD	16.3	78.4	

NOTES:

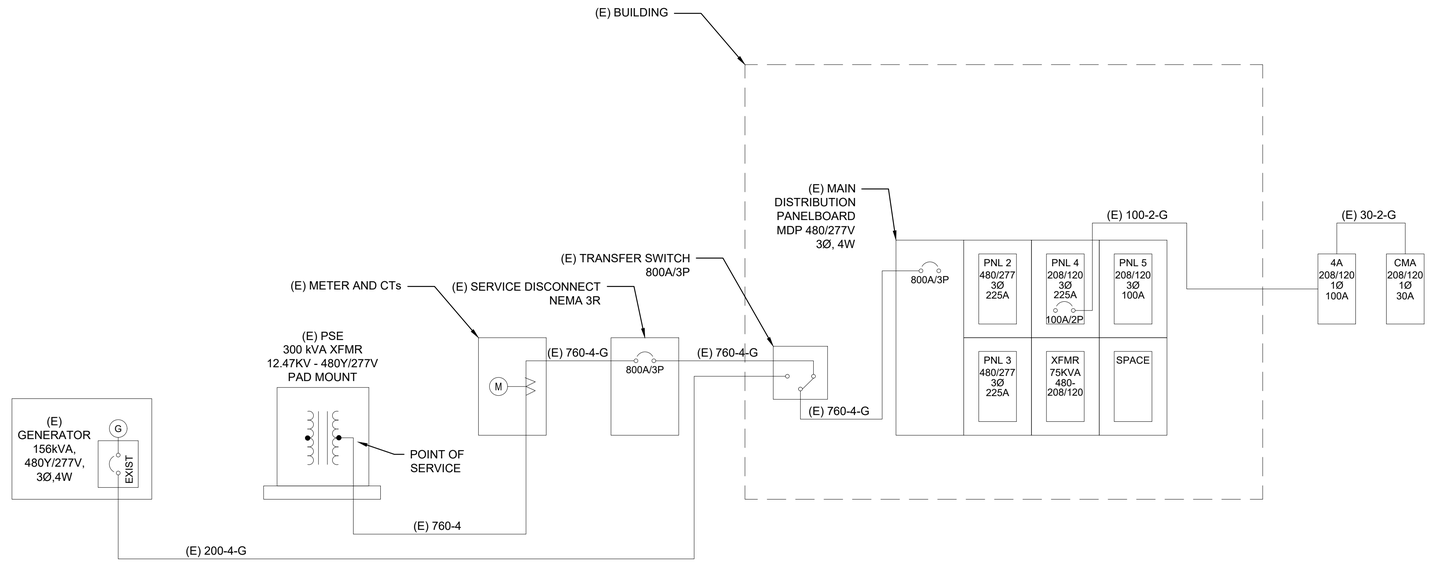
FAULT CURRENT CALCULATION SUMMARY

DESCRIPTION	AVAILABLE SCA
480/277 VOLT	
300 kVA TRANSFORMER	17184
METER & CT CABINET	16900
SERVICE DISCONNECT	16641
TRANSFER SWITCH	16407
MDP	16185
208/120 VOLT	
PANEL 4	15722
PANEL 4A	8492

REVISED LOAD SUMMARY - EXISTING METER
800A 480/277V, 3PH, 4W

	KVA	AMPS	NOTES
EXISTING DEMAND	99.8	120.1	
NEW LOAD ADDED	2.9	3.5	PREWASH ADDITION
TOTAL OVERALL LOAD	102.8	123.6	

NOTES:
LESS THAN 5% LOAD ADDED.



1 ONE-LINE DIAGRAM
SCALE: 1/4"=1'-0"

HULTZ BHU engineers inc
1111 Fawcett Ave, Suite 100 Tacoma, WA 98402
Phone: (253) 383-3257 Fax: (253) 383-3283
general@hultzbhu.com Job Number: 20-165

BID SET 3-11-2022

PROJECT ARCHITECT: LC	05/14/2021	30% PROGRESS SET			REGION NO.	STATE:
DRAWN BY: HBHU	06/18/2021	60% PROGRESS SET			FEDERAL AND PROJECT NO.	
REVIEWED BY:	08/02/2021	PERMIT SET				
REVIEWED BY:	03/11/2022	BID SET				
					JOB NO:	a20-001
					FCR NO:	
AS-BUILT BY:					DESIGN NO:	
	DATE				CONTRACT NO:	

THOMAS URQUHART — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
SIGNED
3-11-2022

Helix design group
6021 12th street east
suite 201
tacoma, wa. 98424
tel: 253.922.9037
fax: 253.922.6499

Washington State Department of Transportation
HQ CAPITAL FACILITIES

NORTHRUP PREWASH RETROFIT NPDES - NWR
PERMIT SET

ONE-LINE RISER DIAGRAM

E501

OF SHEETS

PLOTTED: Friday, March 11, 2022 2:19:29 PM
PLOTTED BY: JOHNT
DWG PATH:I:\2020 JOBS\20-165\DRAWINGS\ACAD-ELEC\20-165_ES01 - ONELINE DIAGRAM1.DWG